

Brownstone & Masonry Repairs and Exterior Historic Structures Report

Concord Town House

22 Monument Square, Concord, MA 01742

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Executive Summary

When the Concord Town House was built in 1851, the Town of Concord was a growing and thriving farming community. The selected site was adjacent to the new Middlesex County Courthouse completed earlier that year. Richard Bond is recognized as the primary architect, however he did work with Charles Parker on the Town House. The first public meetings were held in November 1851.

In 1879-80 the town built an addition to meet the needs for “suitable water closets”, especially for women when the Town House was used for major public events and gatherings. It also would provide separate access to the platform for speakers so that they didn’t have to walk thru the hall and audience to reach the platform. George B. Thayer was the architect for this addition.

Since the completion of the 1879-80 addition, the following changes have taken place:

- 1900 – Interior wired for electricity
- 1910 – Fire escapes constructed
- 1911 – Assembly Hall declared unsafe for theatrical performances
- 1913 – Theatrical productions move out of Town House
- 1930 – Remodel for District Court
 - Remove South (Bedford Street) fire escape
- 1980 – Accessible side entrance added
- 2006 – Asphalt shingle roof and miscellaneous exterior repairs
- 2007 – Fire protection sprinkler system and fire alarm installed
- 2009 – New accessible side entrance

Existing Conditions

The original two-story Italianate style Town House is three bays wide by five bays wide. The original building and side of the addition rests on a split face granite foundation, while the brickwork on the East Elevation of the 1879-80 addition continues to grade. The original building has hard-fired dark red face brick with extensive use of Portland Connecticut Brownstone trim elements. There is a face-bedded band course of Brownstone between the first and second floors. Likewise the window hoods on both floors are face-bedded and naturally bedded brownstone sills and sill brackets. There are also naturally bedded quoins on the first floor of both the original building and additions. There is a rusticated and ornamental brownstone surround at the West main entrance. The bracketed horizontal cornice and sloped cornice is constructed wood but was originally painted with a brown sand paint to match the brownstone. These wood elements are actually in much better condition than the brownstone trim elements. The brick on the sides of the 1879-80 is a hard-fired face brick similar to but not matching the original building, while the rear wall has a much softer common brick.

Masonry conditions are talked about in detail in the existing conditions report but may be summarized as follows:

Granite Foundation – Good condition, needs 100% repointing

Granite Stairs – Granite is in good condition but cheek walls need to be removed and reset

Face Brick – Good condition; needs 100% repointing

Common Brick – Serviceable, some raising damp issues; 100% repointing

Face Bedded Brownstone – Poor condition with extensive material delamination

Naturally Bedded Brownstone – Fair condition with need for selective replacement or repair

NOTE: The partially delaminated and face-bedded brownstone above and adjoining the main West Entrance should be removed before freezing temperatures as part of a make-safe project.

The double-hung windows are in generally good condition and match the original mullion configuration. The building originally had a slate roof, while the current asphalt shingle roof is six years old and is in good condition.

Fire Escape Removal

Based on our review of the current Eighth Edition of the State Building Code, we believe that the North Elevation fire escape can be removed as long as occupancy in the Selectmen's Room is limited to 35 people. The door arrangement from the Selectmen's Room to the corridor will need to be modified and specifics of the proposed changes reviewed and approved by the Concord Building Department as the authority having jurisdiction. Removal of the fire escape will be important to allow replacement of the band stone on the North Elevation.

Architectural Access Board

Although the proposed project involves masonry repairs, the Rules and Regulations of the Architectural Access Board (AAB) are triggered by the cost of repairs on construction relative to the assessed value of the building without land. The current assessed value of the building is \$1,337,600. Compliance with AAB Rules and Regulations for new construction when constructions costs during any 36-month period exceeds 30% (or \$401,280), the building must meet the accessibility requirements for new construction, which includes making all public entrances and spaces accessible. The AAB does make individual variances, such as for the historic front entry when there is a nearby accessible entrance like at the Town House. Interior features need to be checked throughout the building to identify if any upgrades will be required.

Recommended Treatment of Brownstone Trim Elements

First Floor Window Heads	Keep existing brownstone, minor repairs
Quoins	Keep existing brownstone, limited patching & pinning
West Entry Door Surround	Keep existing brownstone, conservation approach, some full face dutchmen and some patching
Window Sills & Brackets – North & West Elevations	Keep existing, salvage three sills & brackets from South Elevation minor repairs
Window Sills & Brackets – South Elevation	New cast stone
Band Course	New face bedded brownstone band course. Deduct alternate for cast stone.
Second Floor Round Window Heads	New cast stone
Attic Circular Window Surround	New cast stone

Concord Town House
Preliminary Budget
September 19, 2012

GENERAL WORK ITEMS	QUANTITIES		COST/UNIT	TOTAL
Staging	1	l.s.	90,000	90,000
Fire Escape Removal	1	l.s.	20,000	20,000
Brick-in and Repairs at Fire Escape	1	l.s.	20,000	20,000
Two (2) New Windows North	3	ea.	15,000	45,000
100% Repointing of Brickwork	7000	s.f.	28	196,000
100% Repointing of Granite	700	s.f.	25	17,500
Rebuild Bowed Face Brick	15		150	2,250
Misc. Brick Replacement/Step Crack Repair/Embedment Removal	500	brick	30	15,000
Replace Common Brick	40	s.f.	150	6,000
Replacement of Flat Band Course with Brownstone	252	l.f.		0
Flashing at Band Course	252	l.f.	30	7,560
Remove and Reset One (1) Course of Brick for Band Course	252	l.f.	50	12,600
Cleaning of Brownstone at West Elevation	350	s.f.	10	3,500
Crack Repair at Granite	2	ea.	755	1,510
West Elevation Entry Stairs - Repairs & Resetting Granite	1	allowance	50,000	50,000
West Elevation Entry Stairs - Railing	2	ea.	10,000	20,000
Horizontal Cornice Flat Seam Copper	65	l.f.	700	45,500
Painting Windows and Cornices	1	allowance	70,000	70,000
Subtotal				\$622,420
Recommended Treatment of Brownstone Trim Elements:				
First Floor Window Heads - Keep existing brownstone, minor repairs	1	l.s.	7,000	7,000
Quoins - Keep existing brownstone, limited patching & pinning	1	l.s.	13,000	13,000
West Entry Door Surround - Keep existing brownstone, conservation approach, some full face dutchmen and some patching				
- two (2) verniculated quoin dutchmen				12,000
- one (1) full face verniculated quoin				12,000
- one (1) flat full face dutchman at jack arch				6,000
- one (1) large L shaped full face verniculated dutchman				15,000
- one (1) flat L shape				5,000
- one (1) trapezoid verniculated full face dutchman				12,000
- misc. pinning & patching				6,000
- two (2) dutchmen at pilasters				10,000
Window Sills & Brackets – North & West Elevation - Keep existing, salvage three sills & brackets from South Elevation minor repairs	3	salvaged	7,500	22,500
	12	minor repair	1,000	12,000
Window Sills & Brackets – South Elevation - New cast stone	13	ea.	5,000	65,000
Band Course - New face bedded brownstone band course. Deduct alternate from cast stone				
- Material	320	c.f.	375	120,000
- Installation	54	pieces	2,000	108,000
Second Floor Round Window Heads - New cast stone	13	ea.	15,000	195,000
Attic Circular Window Surround - New cast stone	1	ea.	25,000	25,000
Subtotal				\$645,500

Concord Town House
Preliminary Budget
September 19, 2012

GENERAL WORK ITEMS	QUANTITIES	COST/UNIT	TOTAL
<i>Subtotal Above</i>			\$1,267,920
General Conditions & Associated Items:			
Project Contingency (10%)			126,792
Fencing, Trailer, Dumpster, Etc.	1 allowance	20,000	20,000
Site Repairs	1 allowance	15,000	15,000
General Conditions (10%)			126,792
Overhead & Profit (7%)			88,754
Subtotal			\$1,645,258
Payment & Performance Bond (2%)			32,905
BASE BID TOTAL			\$1,678,164
A&E Services & Clerk of the Works during Contract Administration			100,000
TOTAL PROJECT COST			\$1,778,164

Deduct Alternate - Cast Stone Band Course			
Cast Stone Band Course - Material Savings			80,000
Deduct Flashing at Band Course			7,500
Deduct Replacement of One (1) Course of Brick			12,600
TOTAL			\$100,100

Concord, Massachusetts
Town House
Exterior Brownstone and Brick Masonry Assessment

On August 21, 2012, Doug Manley of McGinley Kalsow & Associates and Ivan Myjer of Building and Monument Conservation surveyed the exterior masonry of the Concord Town House from the basket of a personnel lift and from the ground. The purpose of the survey was to develop a set of recommendations for maintaining and restoring the masonry walls of the Town House. In 2006, Ivan Myjer, working directly for the Town of Concord, surveyed the exterior from a cherry picker and from the ground and produced a report that described the conditions in and discussed the various options that were available at that time for restoring and preserving the brownstone trim and brickwork. The 2006 report made some general recommendations but did not go as far as laying out a specific program for the treatment of individual units of stone. The purpose of this report is to update the conditions assessment of 2006, re-define the available options in light of recent developments in the field, and then develop a set of specific recommendations with budgets that can then be codified in a set of bid documents.

There are several differences between the 2006 assessment and the current one. Prior to the start of this assessment, McGinley Kalsow Associates produced a set of elevation drawings that allowed us to record existing conditions in specific locations on the building. In 2006, without drawings, the conditions were described in broad terms by elevation and documented with photographs. The current survey team recorded not only the condition of the individual units but also the bedding orientation of each piece of brownstone. Greater emphasis was placed on the brickwork during the current survey and, as a result, a number of step cracks that had not been reported in 2006 were documented this time.

There have been a number of changes to the building since 2006 as well as some changes in the available restoration options. The principal changes to the building were the rebuilding of the smaller of the two chimneys and the removal of the handicap accessibility ramp on the north elevation. In addition, it appears that some, but not all, of the semi-detached pieces of stone that were identified as potential safety hazards in 2006 were removed. In addition, some tests and mock ups for patching and grouting deteriorated brownstone units were installed on the north elevation. The stone patches that were part of the mock-ups have not held up very well. The hairline cracks that have developed in the largest of the patches after only a few years is a good indication of what can go wrong with composite mortar patches applied to brownstone. For this reason our recommendations include only limited amounts of patching. We do not see patching as a long term solution for deteriorated brownstone.

The principal change from 2006 in the available options results from the closing of the historic Portland Connecticut Brownstone Quarry. The quarry, which supplied the original stone for the building as well as the annex, closed in early 2012. All of the remaining quarry blocks were sold to a single stone fabricator in July 2012. The quarry owner retained a number of large slabs of brownstone that are currently available on a first come basis. These developments have imposed limitations on the option of replacing severely deteriorated units with matching Portland Brownstone. While it would be possible to assemble enough material, for example, to replace the

delaminating flat band course on the Town House with new brownstone for a project that begins in the spring of 2013, there is no guarantee that sufficient stone will be available after that.

In 2006, the report contained a short review of the stones that are available for replacing deteriorated Portland Brownstone units with other brown sandstones quarried in the United States or abroad. Since the start of the current economic downturn in 2008, two of the stones that were available in 2006 have been taken off the market and a stone from China, that was not available then, has become available. The appearance and disappearance of stones from the market place is fairly routine as it has been difficult for foreign quarries in particular to evaluate the demand for brown sandstone in the United States. As a result of the frequent changes in availability of foreign stones, it is difficult to plan for a restoration project that depends on a particular stone being available two to five years in the future. Given the cost of importing stone and the lack of a stone that closely matches the color and texture of Portland Brownstone we do not recommend pursuing this option.

Portland Connecticut Brownstone has a distinctive whorled grain that is unique among brownstones and difficult to replicate in materials such as cast stone or cementitious patching materials. When Portland Brownstone is facebedded (cut parallel to the bedding planes) it has a very pronounced grain pattern that resembles mahogany. The swirling patterns are the result of cutting across the peaks and valleys of sediment that were laid down millions of years ago. When it is naturally bedded, the stone has a more linear stratification with each layer differing a bit from the adjacent one due to the varying sizes of the particles in the sedimentary layers. Over the course of six or seven decades the color of the exposed brownstone on a building subtly changes from a brownish purple to a lighter honey colored brown. The cause of the color change is believed to be the migration and weathering of the iron minerals that form the cement that holds the grains of sand together. Freshly cut Portland Brownstone has a very different color than aged and weathered brownstone. This difference in color, especially in facebedded units, remains prominent for many decades. A key component of the masonry restoration strategy that we are recommending is to replace the deteriorated facebedded bandcourse and window surrounds with new facebedded Portland Brownstone units despite the initial difference in color. The Secretary of the Interior's guidelines for Historic Restoration places the highest premium on in-kind replacement of stone when the original stone is still available. We believe the distinctive grain of Portland Brownstone is an important feature of the building that should be retained. In order to reduce deterioration in the future, we recommend protecting the exposed bedding planes at the top of the new brownstone units with lead flashing that would be placed in the joint between the stone and the row of bricks directly above the units. If, however, sufficient Portland Brownstone cannot be obtained, we would recommend replacing deteriorated units with cast stone tinted to match the existing brownstone.

Over the last decades, as the understanding of the role that the clay content of Portland Brownstone plays in the deterioration of the stone advanced, the approaches to the restoration of brownstone structures has evolved from a reliance on covering large areas of loss with cementitious patching compounds to a more nuanced approach involving a combination of techniques and approaches. Now, large brownstone restoration projects frequently employ a mixture of approaches and materials to balance between the requirements of historic authenticity and long term durability. The most difficult issues to resolve arise when units are partially

deteriorated but still serviceable. The options that are available for repairing these units and/or mitigating the deterioration do not, generally speaking, make the units as durable as new units. Therefore, the maintenance cycle for repaired units must be taken into account when developing a maintenance strategy for the entire building.

Our recommendations for the restoration of the brownstone trim on the Concord Town House take a similar approach to mixing materials and repair techniques. We have based our recommendations on an evaluation of the condition of each of the units including its bedding plane orientation. We have also evaluated the different units relative to their contributing role in the structural and historic integrity of the building. In order to retain the sense of age of the Town House, we are recommending that all sound original brownstone units that have minor areas of loss, or moderately weathered surfaces, not receive any treatment at all. Given the limited service life of most patches, as well as the changes in color that frequently plague these type of repairs, we do not recommending filling in small areas of loss. The flat quoins that have small losses at the edges are examples of these the units that would not be repaired.

For units that have experienced moderate levels of loss and/or cracking and delamination, we are recommending that these units be repaired with a combination of crack grouting, face pinning and patching with tinted repair mortars. The flat quoins that have cracks parallel to the bedding planes, as well as the first floor window heads, are examples of units that would receive these type of repairs.

For important units that are structurally sound but have a single area of loss, we recommending repairs with brownstone "dutchmen" cut and carved to match the finishes on the adjacent stone. These "dutchman" repairs will initially stand out because of the difference in color between new and weathered stone but that difference will become less prominent over time. The vermiculated quoins adjacent to the front door are examples of units that would receive this type of repair.

For units that have already lost a significant portion of their original surface, or where the facebedded surface is partially detached, we are recommending full unit replacement with either natural stone or cast stone. The face bedded band course as well as some of the face bedded window surrounds on the second floor are examples of units that would be replaced.

The naturally bedded sills and brackets fall between the latter three categories - some are sound while others are cracked or already missing some sections. We have proposed replacing the severely deteriorated units with cast stone and retaining and repairing the units that have relatively minor cracking. We are evaluating placing all of the cast stone sill replacement units on the south elevation and the natural stone replacements on the north elevation.

In addition to the brownstone scope discussed above, we are recommending some basic repairs and maintenance to the brick and granite portions of the building. These recommendations include 100% repointing of all of the mortar joints on the building as well as replacement of all cracked or damaged bricks. Areas where the brickwork is bowing and/or there are step cracks would be removed and rebuilt utilizing the original bricks.

Preliminary Recommendations

Masonry Scope of Work:

1. Repoint 100% of brick to brick mortar joints as well as all brownstone-to-brownstone and brownstone to brick mortar joints as well as all granite to brick and granite to granite mortar joints.
2. Removal of all metal embedments and replacement of bricks damaged by the embedments.
3. Localized brick removal and replacement at step cracks and areas of displacement where the outer wythe of brick is loose, as well as at the lower wall on the east elevation where bricks are damaged from rising damp.
4. Removal of bricks at north elevation to access corroding steel lintels followed by repair of lintels and replacement of bricks.
5. Grouting of cracks in granite units at the foundation.
6. Repair of brownstone at front entrance door surround using selective unit replacement, carved brownstone dutchmen repairs, patching and installation of stainless steel pins at cracked units followed by grouting of the cracks.
7. Removal of deteriorated brownstone units at flat band course on south, east and west elevation and replacement with new facebedded brownstone units that are protected on the top with flashing. Alternate treatment would be to replace these units with cast stone.
8. Removal of severely deteriorated brownstone units at window heads, sills and brackets and replacement with cast stone units tinted to match the brownstone.
9. Removal and replacement prior cast stone replacement units that have changed color and no longer match the adjacent stone.
10. Repair of moderately deteriorated brownstone sills, bracket and quoins with a combination of patching, pinning and grouting.
11. Evaluate replacing window surround on west elevation where brownstone arched window head was removed and replaced with brick.
12. Removal of fire escape and replacement of damaged bricks.

Non-masonry Items:

Repair wood cornice and repaint with historically correct color
Paint windows

Additional masonry items:

Work at granite steps on front elevation

Notes on Building Construction and General Conditions

Brownstone

The Concord Town House is a load bearing masonry structure constructed from brick on a granite foundation with Portland Connecticut Brownstone trim set into the brickwork. Portland Connecticut Brownstone is a Triassic era sandstone that is easily recognizable by its distinctive

color, prominent mica content and the manner in which it deteriorates along the weakly joined sedimentary bedding planes. While the brick and granite portions of the building are in good condition, suffering mostly from conditions related to deferred maintenance; most of the brownstone trim elements are in very poor condition. The trim elements that are in the worst condition, the flat band on the south, east and west elevations, the arched window heads with keystones, and the vermiculated quoins above the main entrance are facebedded units that are actively delaminating. About half of these units have already lost their original outer layer.

Portland Brownstone has a service life in the northeast of roughly 100 to 125 years. The trim elements on the Town House are over 150 years old and therefore many are in an advanced state of deterioration. All sedimentary stones are more vulnerable to deterioration when the units are installed with the bedding planes set vertically (facebedded) rather than horizontally (naturally bedded) but naturally bedded units are not immune to deterioration. Naturally bedded units that project from the building line such as the window sills, and the brackets beneath them, tend to deteriorate on the underside. Only the quoins at the corners, which are predominantly naturally bedded with less of a projection from the face of the brick, are in relatively good condition.

Brick Masonry

The bricks on the north, south and west elevations are well fired durable bricks. The bricks on these three elevations were set without any exposed headers (bricks set perpendicular to wall that bond the exterior bricks to the inner wythe of bricks). There is a good chance that concealed headers were used to bond the outer wythe of brick to interior wythes as this was a common technique used in the construction of mid- 19th century Italianate buildings. The bricks on these elevations were set with the faces of the bricks slightly tilted or slightly out of plane with the adjacent bricks. This was another mid-19th century technique that was employed in Italianate buildings to minimize/reduce the width of the mortar joints in situations where the bricks were not perfectly made rectangles.

The original lime based mortar can be observed in most of the brick joints on the upper sections of the north, south and west walls. It appears that the lower sections of wall were skimcoated at one point with a cement mortar that was applied over the weathered joint without raking it out first, but it does not appear that the whole building ever received a complete program of repointing.

Step cracks as well as small areas where the bricks are displaced were noted in several locations on the north, south and east elevations. These cracks appear to be in locations where some settlement has taken place probably due to the erosion of the setting mortar inside the wall.

The rear of the building (east elevation) contains a mix of original common brick that do not have the hard fired skin of the bricks on the other elevations and later replacement bricks that were used to seal up openings in the wall or replace damaged bricks. There is a persistent problem with rising damp on the east elevation and consequently the lower courses of common brick flanking the door are pitted and friable. The mortar joints in the pediment on the east elevation as well as at the lower section are failing and in urgent need of repointing.

Discussions of Brownstone Repair Options:

Patching

The most common type of brownstone repair consists of rebuilding areas of loss with cement based patching mortar that has been integrally tinted to match the color of the brownstone. These mortars usually are factory mixed, proprietary mortars that are purchased from a specialty vendor who requires that the masons working for the contractor complete a course in using the product as a condition for sale. Before the introduction of stone patching products patches were mixed at the jobsite by an experienced mason using cement, lime, sand, aggregate, pigment and sometimes acrylic additives but this approach is increasingly less common.

More recently, hydraulic lime based patching materials have been introduced to the US market. These products are generally considered to have a higher rate of water vapor transmission than the cement based products but this claim is not well documented.

Patching small areas of loss on naturally bedded units is a viable technique for extending the life of an original unit of stone but patching large areas of deteriorated face bedded brownstone is not viable because, the repair is only as durable as the bond between the weakest lamina within the repaired unit of stone. Patching materials generally have a high rate of shrinkage and when applied to large areas are prone to shrinkage and cracking. Another consideration in using patching materials over a large expanse of stone is that the materials do not have good color retention - a patch that matches when it is first applied can rapidly fade and stand out as a light area after only two or three years.

Stone Dutchmen (Partial replacement of a deteriorated section of stone with new matching stone)

Cutting out deteriorated sections of stone from an otherwise sound unit and replacing them with new pieces of matching stone cut and carved to match the existing unit is referred to as a “dutchmen repair”. A properly installed dutchman has tight seams and utilizes a high grade water tolerant stone epoxy and stainless steel pins. The decision as to when and where to use a stone dutchmen depends on the size of the area of loss or deterioration. It also depends on the soundness of the substrate that will receive the pins that hold the dutchmen in place. While a stone dutchmen is a sound and durable repair it also can be relatively expensive. The cost of cutting and carving more than one dutchmen into a single unit of stone can sometimes exceed the cost of replacing the entire unit.

Stone Replacement

For units of stone that are significantly deteriorated, replacement of the entire unit is the only viable option. There are three options for stone replacement. The first is to replace the deteriorated units with new Portland, Connecticut Brownstone. The original quarry, which closed in the 1930’s was reopened in 1994 and has just recently been closed again. The second option is to replace the deteriorated units with high quality integrally tinted cast stone. The third option,

which was not explored much in the two decades that the Portland Quarry was open but is now being revisited, is to replace deteriorated stone with another type of brown sandstone. It is possible, even desirable, to utilize at least two of these strategies on the same project in conjunction with treatments such as stone dutchmen and stone pinning to restore a brownstone building. The pros and cons of each of the three replacement options are discussed below.

Replacement with Portland Connecticut Brownstone:

The Secretary of the Interior's Guidelines for Historic Preservation ranks "in kind replacement" as being far preferable to replacement with alternative materials. The distinctive appearance of the Portland Brownstone makes the use of non-original, non-matching materials less attractive. A restoration program based on wholesale replacement with Portland Brownstone should take into account that unmaintained buildings constructed with Portland Brownstone begin to undergo stone failure after about 50 years and well maintained structures after about 90. In order to ensure that the most durable and aesthetically pleasing stone is obtained from the quarry, the stone must be carefully selected from the quarry. Since the yield of high quality stone from Portland Connecticut Brownstone Quarry blocks averages about 50%, the stone fabrication process must be carefully monitored so that the less desirable 50% of the block is not used for fabricating replacement units.

The life span of any proposed treatments is an important consideration, as are the costs of scaffolding or staging a building to maintain or redo treatments in the future. Considering the above factors, Portland Connecticut Brownstone is most viable as a replacement material on the portions of the building where natural stone is crucial to the historic appearance of the building.

In the decades prior to the reopening of the Portland Brownstone Quarry, stone salvaged from demolished buildings or railroad embankments was recut and used for restoration projects. The supply of new stone is limited to the blocks that were on the market when the quarry closed and the slabs that the quarry owner retained and is offering for sale. The material is available on a first come basis so it is difficult to know if sufficient material will be available a couple of years from now.

Salvaged Portland Brownstone was not used much after the quarry reopened. Stone salvaged from historic buildings is generally architectural grade material but stone salvaged from railroad embankments is generally not architectural grade material. Railroad stone generally was drawn from the part of the quarry that contained large white aggregate and, while durable, does not match the appearance of historic architectural grade stone.

Replacement with other natural stones:

Portland Connecticut Brownstone was the most frequently used brown sandstone in the northeastern United States during the second half of the 19th Century. Alternative replacement stones must be evaluated not only for their appearance, but also for their durability. The presence

of even small amounts of carbonate materials, for example, can be extremely detrimental to sandstone.

There are a number of ASTM tests for sandstone that could be applied to judge the potential suitability of a replacement stone that has met the basic aesthetic criteria. Chief among these would be accelerated weathering test that approximate the conditions encountered in the Northeastern United States. The ultimate strength of a sandstone, measured in terms of crushing strength, is not a good indicator of how well or poorly it will weather. Porosity, permeability, the clay content and the chemistry of the stone's are more important than ultimate strength.

From a visual standpoint none of the sandstone currently quarried in North America, the UK, Germany or China match the distinctive reddish purple color of freshly quarried Portland Brownstone or the light brown tint of aged and weathered stone. Among the sandstones that have been examined and rejected as good color matches for Portland Connecticut Brownstone are: Vineyard Red from Utah, Briar Hill sandstone from Ohio, Mansfield sandstone from Indiana, Medina sandstone from New York, Hummel sandstone from Pennsylvania, North Port, Saint Mary's and Plumrose from Nova Scotia, Canada, Red Harrington from the UK and Carl Schilling stone from Germany and more recently two grades of stone from China.

Replacement with Cast Stone:

Cast stone or pre-cast concrete, as it sometimes referred to, is commonly used to replace deteriorated or lost brownstone. In some cases it is chosen because the original material is no longer available. In other cases it is chosen strictly for reasons of cost because repeating units can be cast for much less than the cost of fabricating them from natural stone. In still other cases, cast stone is selected simply on the belief that it is more durable than natural sandstone.

Cast stone, a man made product, is subject to some vagaries in the manufacturing process. Quality control within the plant, air entrainment and the type and placement of reinforcing steel are all crucial in determining the durability of cast stone. Cast stone production in the United States is roughly one hundred years old. Early cast stone has failed with the same regularity as natural stone on buildings of the same age but recent developments and have made it more of an engineered product and therefore more durable. However, it is not entirely certain that cast stone units will necessarily remain serviceable longer than natural sandstone units

The manner in which cast stone weathers relative to natural stone is an important consideration. The difference in the weathering and soiling process accentuates the difference in the two materials over time. The pigments utilized in cast stone are not completely light fast and the cement matrix has a tendency to change colors over time. While Portland Brownstone gets browner and richer in color over time due to the slow migration of iron to the surface, cast stone generally tends to fade and get lighter over time.

An additional factor that affects the long-term appearance of cast stone is the type and color of the sand and aggregates used in the mix. As the stone weathers, increasing amounts of the aggregates are exposed. If the aggregate does not match the color of the Portland Connecticut

brownstone then the difference in appearance between the two materials becomes much more pronounced.

A distinct advantage that cast stone has over natural brownstone is that it is a homogenous material without bedding planes or natural changes in grain size or mineral distribution. Therefore, as cast stone ages and weathers, it does not present the same type of safety hazard as natural sandstone.

There are two basic types of cast stone available today "dry tamp" and "wet poured". The specifications for the two products appear to be very similar but dry tamp cast stone does not have a good track record in the northern portions of the United States. "Wet poured" or "measurable slump" cast stone is a significantly more durable product in areas of the country that undergo multiple freeze-thaw cycles.

Chemical Strengthening of Stone and Water Resistant Coatings

There are a small group of chemical treatments that have proved effective at repairing the strength of deteriorated stone. These chemicals, however, have not proved to be effective for the treatment of deteriorated Portland Connecticut Brownstone. Recent studies conducted under the direction of Dr. George Scherer at Princeton University have demonstrated that the destructive force exerted by the swelling of wetted clays within the stone is greater than the consolidating effect of the most widely used stone consolidants.



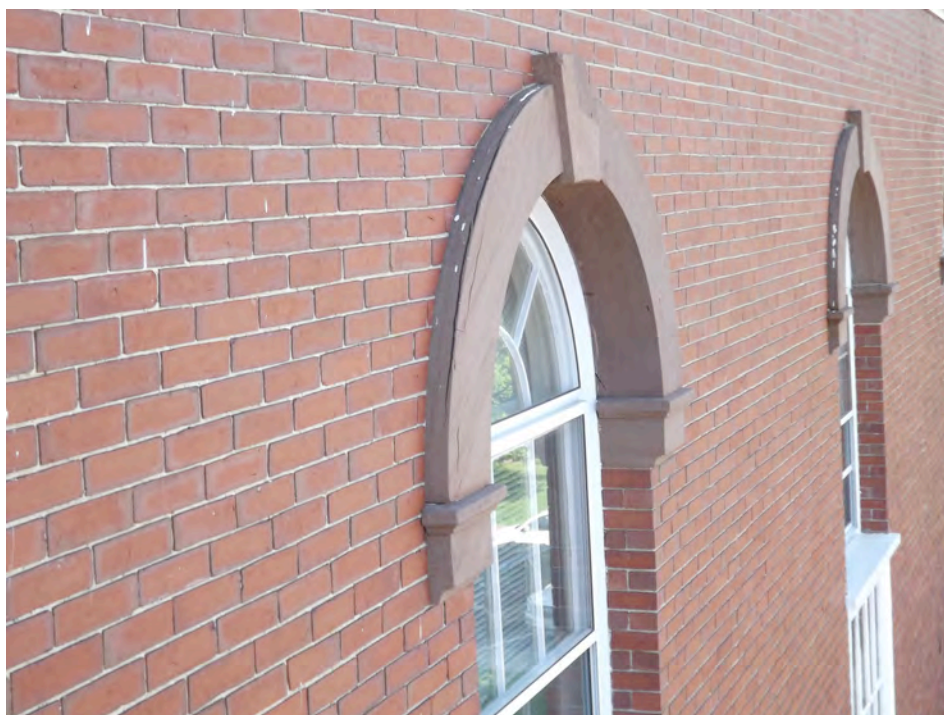
Lower Vermiculated Quoin in 2006



Progression of Deterioration from 2006 – 2012=



Corrosion at Steel Lintels on the East Elevation



Edge View of Delamination at Facebedded Brownstone Arch Window Surrounds



**Frontal View of Cracked and Delaminated Embedded Brownstone Window Surround.
Note Step Crack in Brickwork Above Brownstone Keystone.**



Frontal View of Delaminated Facebedded Brownstone Window Surround



Edge view of delaminated facebedded bandcourse unit.



Parallel cracks in naturally bedded window sill



Original brownstone dutchman repair on lower sill directly above bracket.
Note grout repairs at cracked bracket completed since 2006



Vermiculated quoins, flat quoins and band above entrance door.
Note cracking at vermiculated quoins.



Bricks damaged from rising damp and or snow pushed against the side of the building.



Open and recessed brick mortar joints on west elevation.



Recently applied patch beginning to crack and separate at the margins



Parallel cracks at naturally bedded quoins.
Note delamination at the return on the bandcourse unit.



Newburyport Town Hall Restoration -
Window heads, window sills and stringcourse are cast stone.
Quoins are original brownstone.

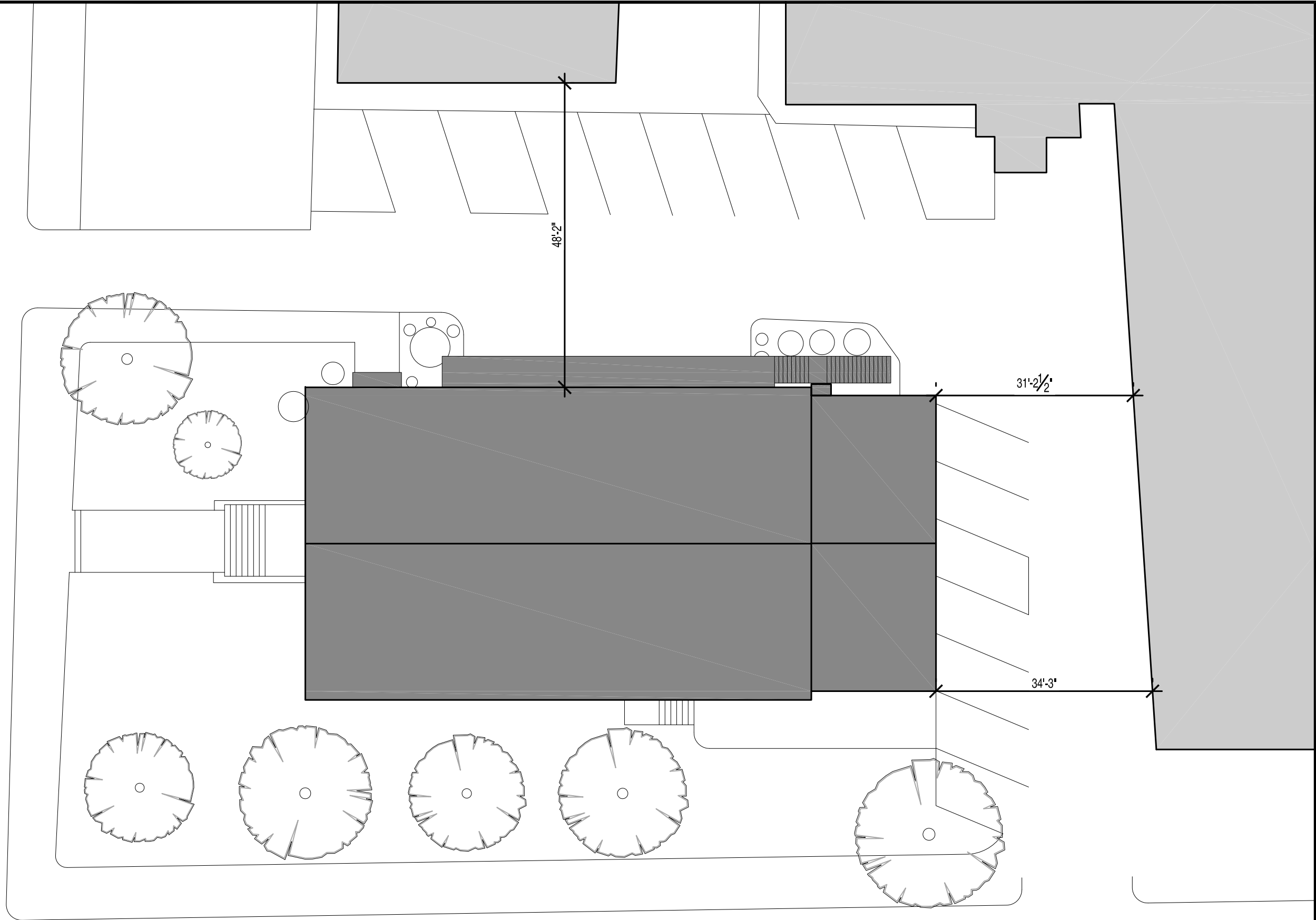


Completed brownstone restoration at the Victoria Mansion in Portland, Maine.

Quoins are repaired with full and partial dutchmen.

Ashlar units and pediment over window as well as pilaster columns and capitals are new brownstone - Note the difference in color between the weathered original stone and the new Portland Brownstone

MONUMENT SQUARE



Concord Town House
22 Monument Square
Concord, MA 01742
Town of Concord

Date: 09/19/2012
Scale: 1/16" = 1'
Drawn By: JBH
Reviewed By: WCK
Project No: 1642

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SITE PLAN

A1

1 SITE PLAN
1/16"=1'-0"

BEDFORD STREET



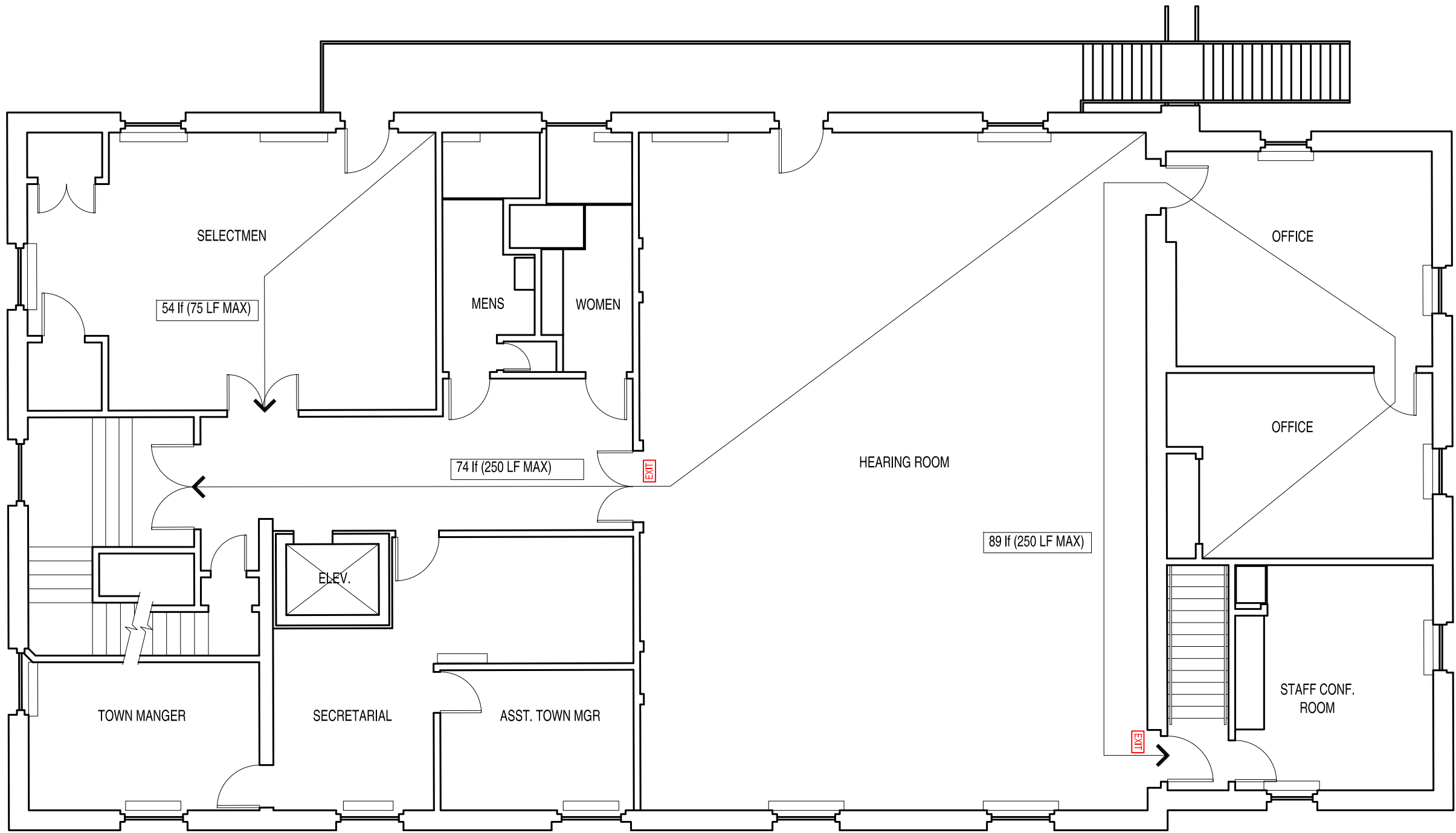
Concord Town House
22 Monument Square
Concord, MA 01742
Town of Concord

Date: 09/19/2012
Scale: 1/8" = 1'
Drawn By: JBH
Reviewed By: WCK
Project No: 1642

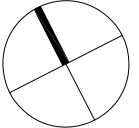
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SECOND FLOOR
PLAN

A2



1 SECOND FLOOR PLAN
1/8"=1'-0"





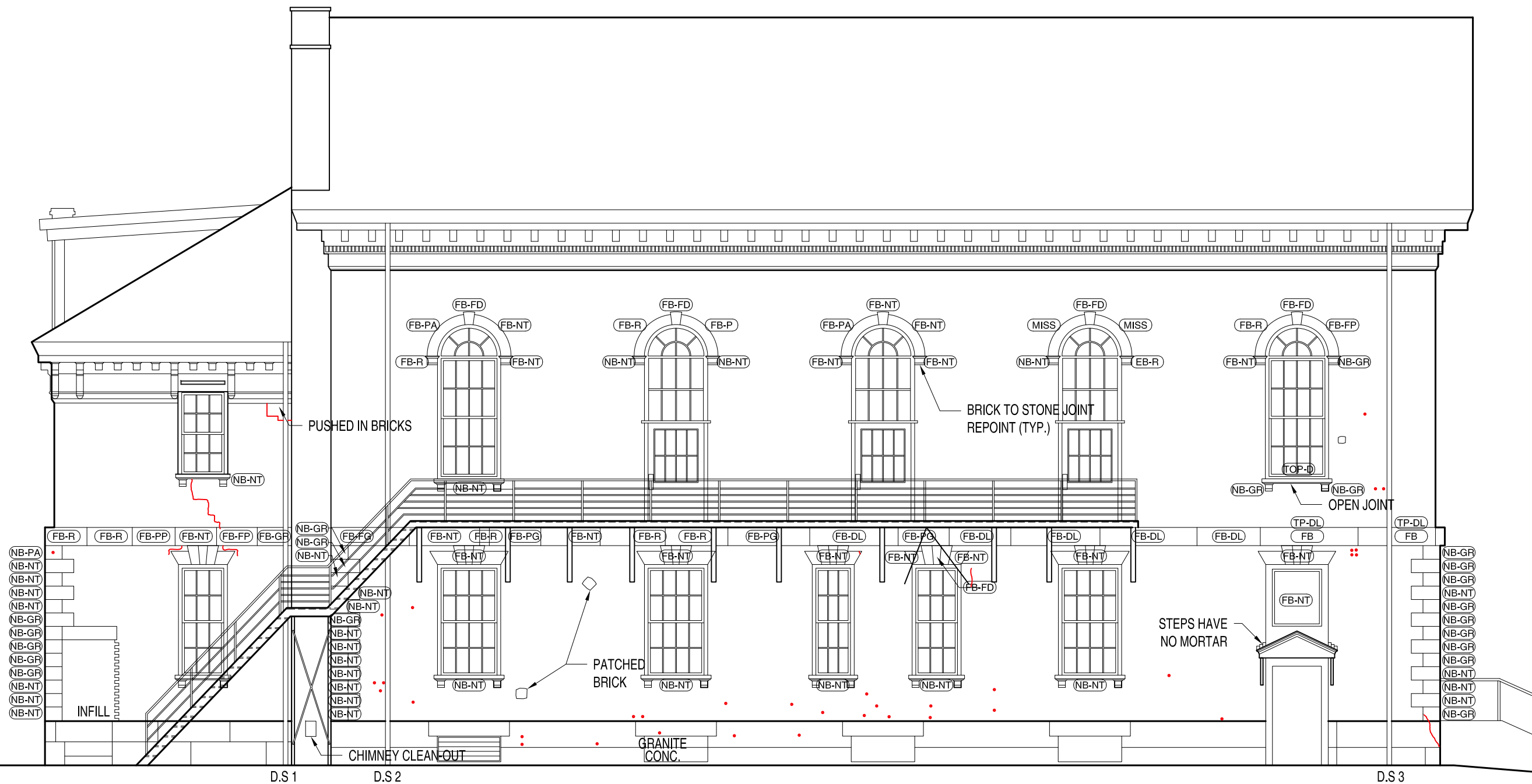
Concord Town House
22 Monument Square
Concord, MA 01742
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Date: 09/19/2012
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NORTH
ELEVATION

A3



1 NORTH ELEVATION
1/8"=1'-0"

LEGEND

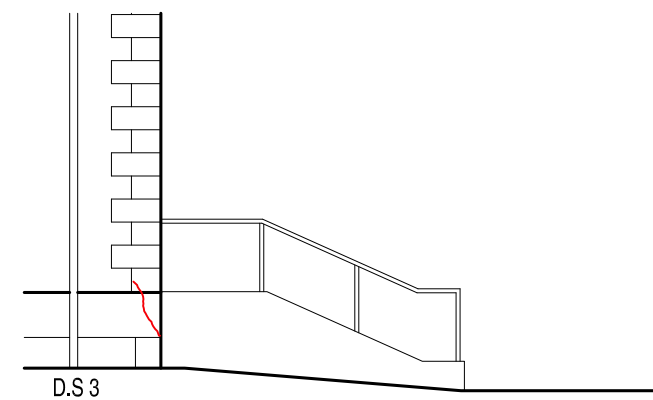
TYPE	TREATMENT
•	REMOVE EMBEDDED METAL
(NB-XX)	NATURAL BED BROWNSTONE
(FB-XX)	FACE BED BROWNSTONE
(EB-XX)	END BED BROWNSTONE

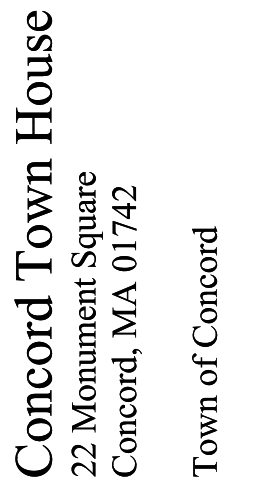
(XX-FP)	FACE PIN
(XX-PA)	PATCH
(XX-DU)	DUTCHMAN
(XX-FD)	FULL FACE DUTCHMAN
(XX-NT)	NO TREATMENT
(XX-R)	REPLACE
(XX-GR)	GROUT CRACKS
(XX-PP)	PIN AND PATCH
(XX-DL)	DELAMINATING
(XX-PG)	PIN AND GROUT
(MISS)	MISSING
(EM-RM)	EMERGENCY REMOVAL

ELEVATION TOTAL

BRICK	1993 ft ²
WALL	1832 ft ²
CHIMNEY	161 ft ²
BROWNSTONE	278 ft ²
BELT COURSE (100 ft)	126 ft ²
QUIONS	62 ft ²
SILLS	18 ft ²
LINTELS	72 ft ²
GRANITE	228 ft ²

2 ENTRY STAIR NORTH ELEVATION
1/8"=1'-0"



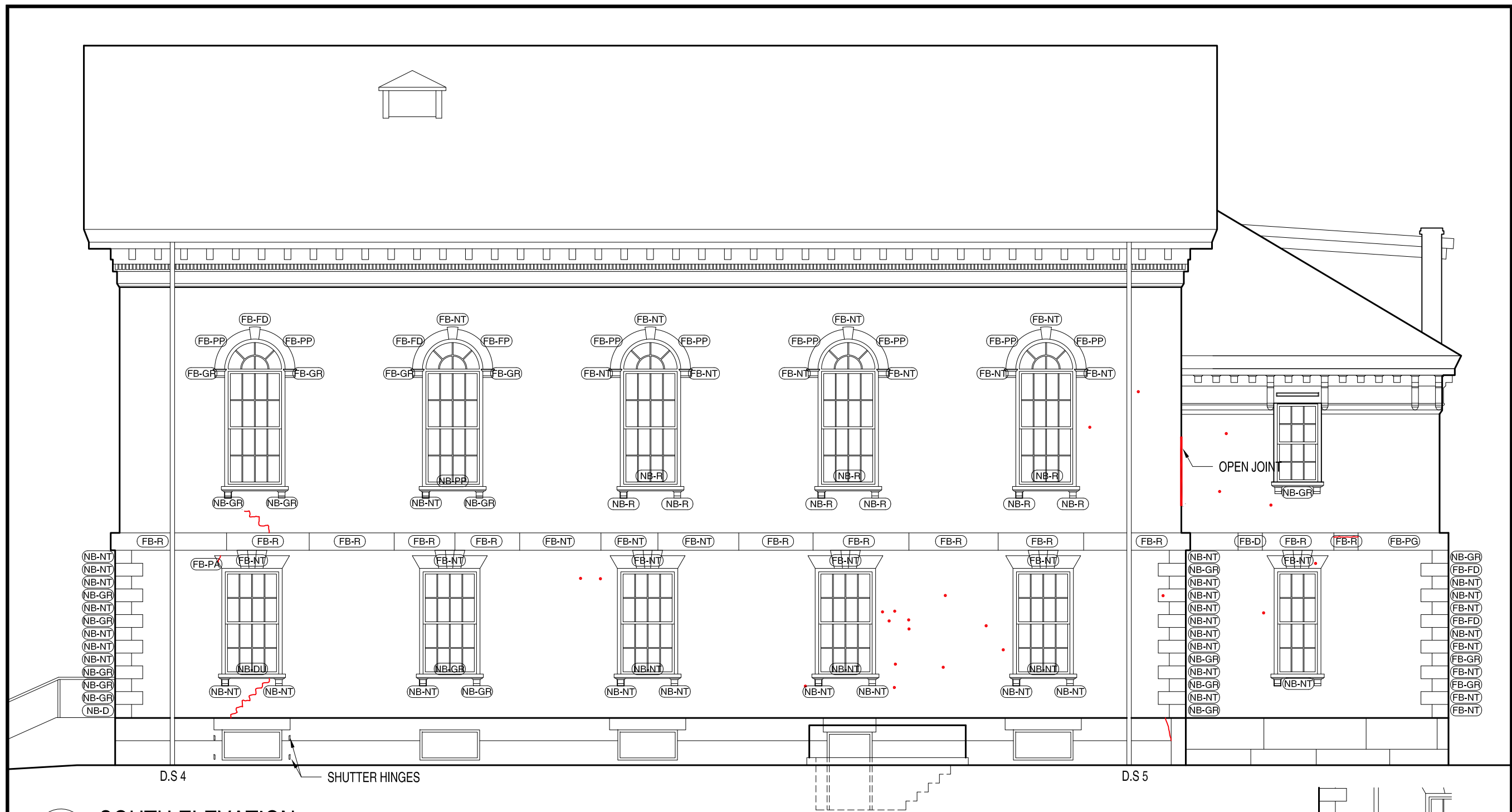


Date: 09/19/2012
Scale: 1/8" = 1'
Drawn By: JBH
Reviewed By: WCK
Project No: 1642



SOUTH
ELEVATION

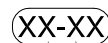
A4



1 SOUTH ELEVATION

$$1/8'' = 1' - 0''$$

LEGEND



TYPE _____ TREATMENT _____

REMOVE EMBEDDED METAL

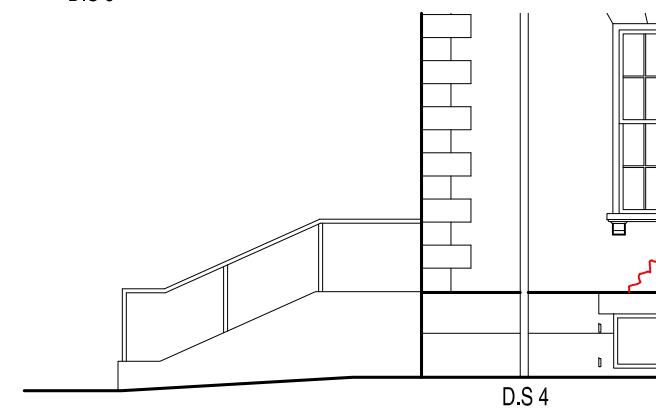
(NB-XX) NATURAL BED BROWNSTONE
(FB-XX) FACE BED BROWNSTONE
(FB-XX) END BED BROWNSTONE

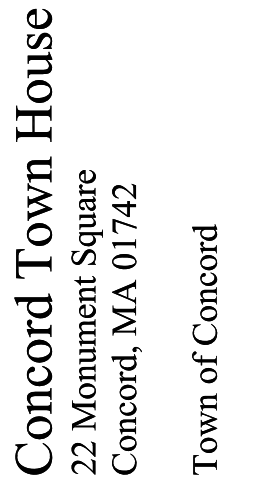
XX-FP	FACE PIN
XX-PA	PATCH
XX-DU	DUTCHMAN
XX-FD	FULL FACE DUTCHMAN
XX-NT	NO TREATMENT
XX-R	REPLACE
XX-GF	GROUT CRACKS
XX-PP	PIN AND PATCH
XX-DL	DELAMINATING
XX-PG	PIN AND GROUT
MISS	MISSING
EM-RM	EMERGENCY REMOVAL

ELEVATION TOTAL

BRICK	2305 ft2
WALL	2261 ft2
CHIMNEY	44 ft2
BROWNSTONE	294 ft2
BELT COURSE (100 ft)	130 ft2
QUIONS	61 ft2
SILLS	26 ft2
LINTELS	77 ft2
GRANITE	303 ft2

2 ENTRY STAIR SOUTH ELEVATION

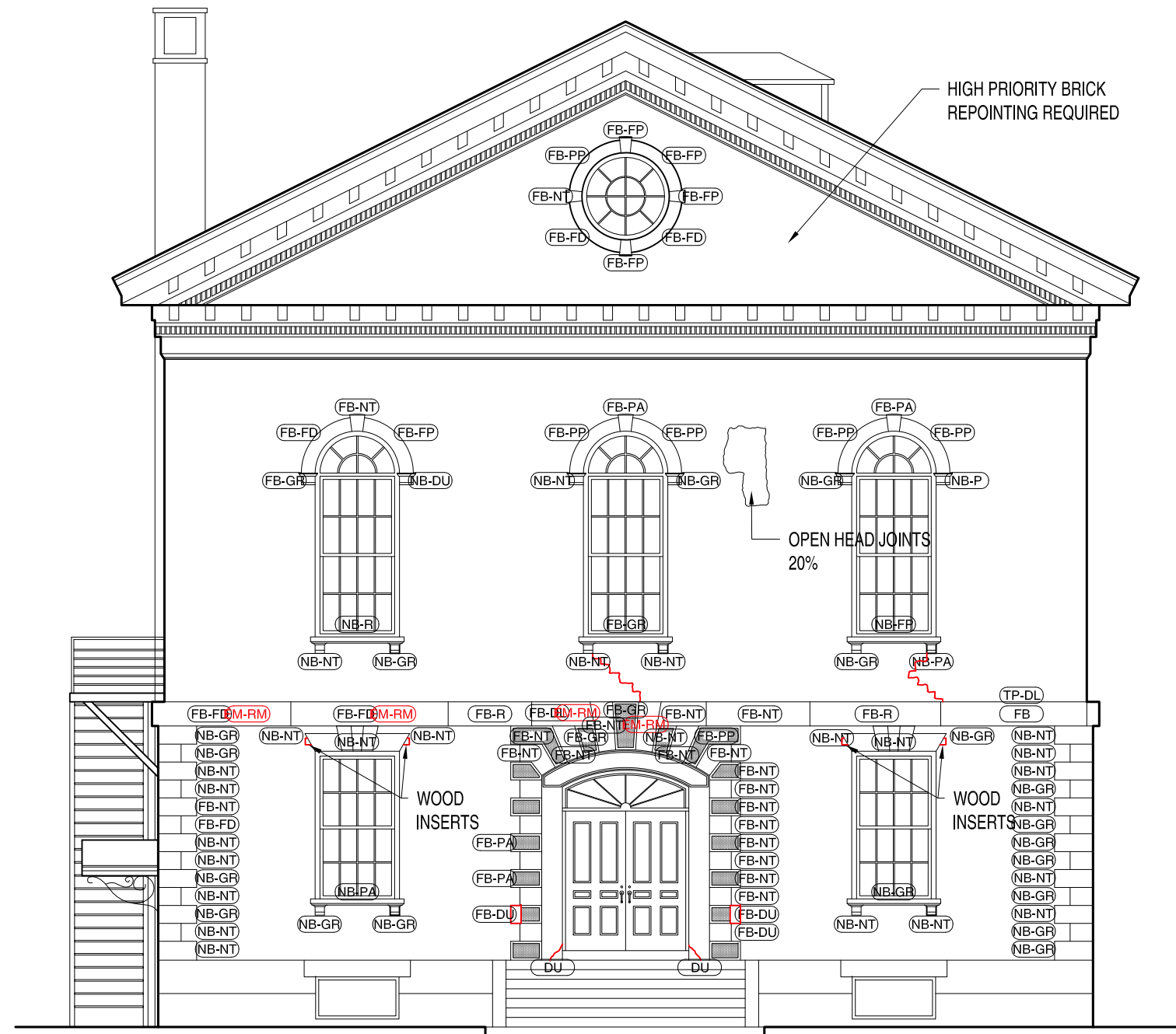
$$1/8'' = 1' - 0''$$





Date: 09/19/2012
Scale: 1/8" = 1'
Drawn By: JBH
Reviewed By: WCK
Project No: 1642

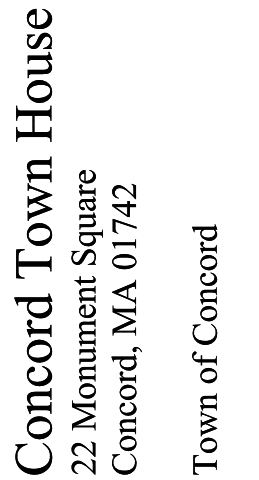


A5



1 WEST ELEVATION
1/8"=1'-0"

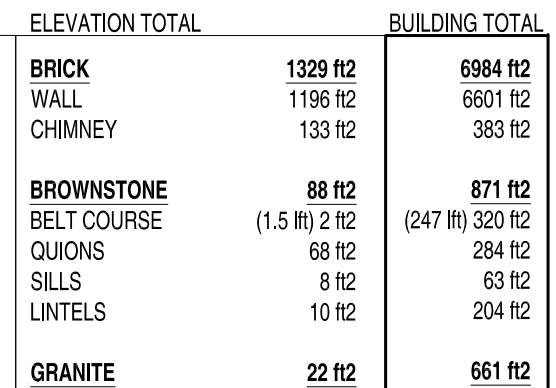
LEGEND		ELEVATION TOTAL	
 <p>TYPE TREATMENT</p>			
• REMOVE EMBEDDED METAL		BRICK 1357 FT2 WALL 1312 ft2 CHIMNEY 45 ft2	
(NB-XX) NATURAL BED BROWNSTONE (FB-XX) FACE BED BROWNSTONE (EB-XX) END BED BROWNSTONE	(XX-FP) FACE PIN (XX-PA) PATCH (XX-DU) DUTCHMAN (XX-FD) FULL FACE DUTCHMAN (XX-NT) NO TREATMENT (XX-R) REPLACE (XX-GR) GROUT CRACKS (XX-PP) PIN AND PATCH (XX-DL) DELAMINATING (XX-PG) PIN AND GROUT (MISS) MISSING (EM-RM) EMERGENCY REMOVAL	BROWNSTONE 211 ft2 BELT COURSE (46 ft) 62 ft2 QUIONS 93 ft2 SILLS 11 ft2 LINTELS 45 ft2	
		GRANITE 108 ft2	



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A6


$$1/8'' = 1' - 0''$$

CONCORD TOWN HOUSE HISTORIC STRUCTURE REPORT

Summary

The research for the “Historical Background and Context” and “Chronology of Development and Use” focused on the following primary sources: the Town of Concord’s *Annual Report of the Town Officers*, historical maps of the Town of Concord and Middlesex County, and historical images and photographs. The 2006 *Concord, Massachusetts Town House: Exterior Conditions Assessment and Treatment Recommendations* by Ivan Myjer provided valuable information about the original masonry materials and techniques used on the Town House exterior. The Concord Building Department Records provided useful information about changes to the building from 1930 onwards. Several secondary sources based on town records provided additional details: Sarah Chapin’s 2001 *Entering Concord: A History of Public Affairs 1850-2000* and the 1950 *Concord Town House: some notes on the building and its use* by Fred A. Tower.

One note regarding the references to the Town House and rear addition elevations: it is understood that the building is on an angle relative to cardinal directions, however, to be consistent with the orientation of the various maps and site plans and to simplify the references, this report identifies the front elevation as the West Elevation, the left side as the North Elevation, the rear as the East Elevation, and the right side (facing Bedford Street) as the South Elevation.

A. Historical Background and Context

Introduction

The Concord Town House is located at 22 Monument Square and stands among important historic civic buildings, older residences and office buildings. The handsome Italianate red brick and Portland Connecticut Brownstone building is dominated by an imposing façade pediment and white painted wooden cornice with classical details.¹ The substantial granite foundation and elevated basement, brownstone first story quoins and vermiculated² brownstone door surround contribute to the impression of an important and enduring building that stands testimony to the Town of Concord’s desire to create, in 1851, the center for the town’s civic and cultural life; indeed “a monument of the forecast, enterprise and liberality of the present generation.”³

When the Concord Town House was built in 1851, the town of Concord was a growing and thriving community. The economy was based on agriculture and farming had recently shifted to providing milk and fruit for the urban markets connected by the railroads in the 1840s. Concord Center and the

¹ According to Anne Forbes’ 1996 *Inventory Form B – Building: CON.302*, the Town House is the only large brick Italianate style building in Concord; the combination of brick with brownstone trim is also quite rare in Concord.

² The Getty Institute *Art & Architecture Thesaurus Online* defines vermiculation as “A pattern of short, irregular wriggling channels imitating worm tracks, used as a surface decoration on stone.”

³ Concord, *Annual Report of the Town Officers*, 1853.

Monument Square area continued to be a major focus of settlement, as they had been since the Colonial Period. Concord Center was also a transportation hub with turnpike and highway junctions.

The Town House was intended to centralize town government offices, consolidate the increasing number of records pertaining to town affairs and archive valuable historical papers; the building would also serve as an important civic and cultural space. The Town House served as the center of the town government for almost a century and as an important cultural space for at least half a century; today the Town House is one of several town government buildings and no longer hosts cultural events.

The Town House was the first building dedicated to town government; however, there were several earlier sites that served as places to conduct town meetings and town business. The first two meetinghouses in Concord were used for church services and also for town meetings and town business. The first meetinghouse is thought to have been built around 1636 and was located near the old burying ground; the second meetinghouse was built in 1673 near the site of the current First Parish Church. In 1712, the church moved out of the second meetinghouse into the newly completed third meetinghouse. Town business continued in the second meetinghouse until 1719, when town meetings were moved to a new building adjoining the Common. The 1719 building also housed the courts.⁴ The 1719 building was replaced by the first courthouse in 1794; the new courthouse was also used for town meetings and town business. After the first courthouse burned down in 1849, the Town of Concord expected that the town government would continue to share space with the courts. When the county commissioners rejected the request to include space for a town hall in the new courthouse building, the Town of Concord decided to build the Town House in the lot adjacent to the new Middlesex County courthouse; the new courthouse and Town House buildings were completed in 1851.

The building history of the Town House took place in three main phases: the 1851 Town House, the 1879-80 rear addition, and the 1930 remodeling. After World War II, the Town House became one of several town buildings as Concord built new offices to meet the needs of an expanding town government. Major projects in more recent years have focused on accessibility, climate control and fire safety.

There has been speculation that the name “Town House” has its roots in the Colonial Period and the 1657 Massachusetts Town House and the old Boston State House. The name may also have been intended to evoke the building’s role as a center for the community. What is clear from the town records and special reports is that the building was always officially referred to as the Town House. The same records appear to use “Town Hall” to refer to the public assembly hall in the Town House which was used for town meetings and was available for public events. Most of the historic maps identify the building as “Town Hall”, perhaps to identify the primary town and public space in the building or perhaps to distinguish the building from the courthouse next door.

1851 Town House

The Town of Concord nominated a committee to look into the matter of building the new Town House and accepted the committee recommendations for the present day site in an April 1850 meeting. A Town House Building Committee of five prominent community members was then appointed to oversee the building project.

⁴ In 1885, a bronze plaque was placed at the site of the 1719 building and can still be seen today on the north side of Monument Square.

The purchase of the land was concluded by late summer of 1851. The town approved construction of a brick building with brown sandstone trim and a slate roof. The building was intended to house town offices, committee rooms, the meeting hall, school rooms and the town library.

In November of 1851, a public town meeting was held in new assembly hall and shortly thereafter the “Town Hall” was made available for public cultural and social events. The Town House became the center for the community as town residents rented the assembly hall for a variety of political and educational events and meetings, social gatherings and entertainments, and the observation and commemoration of important town and national events.

The Town of Concord spent \$19,253.00 on the new Town House. No information appears to have been recorded about the contractors Adams & Bonney, except that they received \$12,783.23 for their work. The architects Richard Bond and Charles Parker were paid \$578.00.

Today, Richard Bond is recognized as the primary architect on the project; he did, however, work with Charles Parker⁵ on a number of projects. Bond was in practice as early as 1848 and was considered a leading Boston architect of the time. Bond was also active in establishing the National Society of Architects which was superseded by the American Institute of Architects in 1857. The Concord Town House is considered to be Bond’s best surviving work in the Boston area.⁶ Ten years before the Town House was built, Bond remodeled the First Parish Church in Concord.⁷ John M. Cheney, who was also a member of the Town House Building Committee, recommended Bond for the First Parish Church project. Other works included Lewis Wharf (1836-40), the early Gothic Revival St. John’s Episcopal Church in Charlestown (1841), and the Gothic Revival Candler Cottage (1849). Several of Bond’s buildings, such as the 1847 Lawrence Hall (built in a similar style to the Concord Town House) and 1838-41 Gothic Revival Gore Hall, both at Harvard, have been demolished.

1879-80 Rear Addition

The Town of Concord and Concord Center continued to grow steadily from the time that the 1851 Town House was built. The town attracted new suburban development, and at the time that the rear addition was built, the residences in the center were primarily homes for the upper-class.

Public events and gatherings at the Town House continued to be very popular. Initially, the town wanted to create an addition for “suitable water closets”; there was particular concern that women have an acceptable facility when the Town Hall was used for major public meetings. An addition would also provide separate access to the assembly hall platform so that speakers would no longer have to walk through the entire hall and audience to reach the platform. The town was forced to build when, citing safety issues, the State Inspector of Factories and Public Buildings ordered the town to construct a stairway in the rear of the 1851 Town House.

⁵ Parker’s work included two Italian palazzo inspired structures: a warehouse built in 1853 that is now The Architects Building at 50-52 Broad Street and the 1848 Brookline Reservoir distribution chamber. He also built the 1853 brownstone row in Blackstone Square (35-45 West Newton Street) in the Italian Renaissance style.

⁶ Keith Morgan, *Buildings of Massachusetts: Metropolitan Boston*. (Charlottesville: University of Virginia Press, 2009).

⁷ In 1901, after much of the building was lost in a fire, the church was rebuilt according to Richard Bond’s plan.

The new rear addition cost \$3,501.00, of which \$3,306.65 was paid to Foster & Dutton of Maine. The architect George B. Thayer received \$165.60. Thayer, who designed the 1873 Morse Institute Library Building in Natick, Massachusetts, created an unobtrusive two story rear addition that was integrated with the 1851 Town House by the use of similar materials, architectural style and ornamentation.

1930 Remodeling

After the District Court of Central Middlesex was forced to move out of leased space in the Middlesex Insurance Company building, the selectmen voted to renovate the second floor assembly hall space (Town Hall) in the Town House for the use of the District Court. Local Concord architect William F. Kussin created the remodeling plans for \$1,280.39.⁸ The contractor, John J. Bent, received \$11,724.09 for his work. Other expenses included linoleum from Carter Furniture (\$505.05), electrical work, and hardware. The total cost came to \$14,096.00. With the exception of a room reserved for the selectmen, the second floor office space was leased by the District Court.

Post World War II to the Present

Similar to many other towns in the greater Boston area after the Second World War, Concord experienced a surge in population and building and a related expansion of town government administration and planning. The shortage of town government office space led the town of Concord to build new buildings and repurpose existing ones to house town departments and boards. A number of departments moved out of the Town House and into new offices in the early 1950s; the District Court moved out of the leased space in the late 1960s. Major projects from the 1980s onwards focused on improving and modernizing the building to address accessibility for people with disabilities, update the heating and air conditioning systems, and upgrade fire safety and protection.

Conclusion

The Town House stopped serving as a cultural and social center of the Town of Concord in the early 1900s. Yet today the building continues to serve its primary historical function of housing town offices and providing space for public meetings and hearings. The Town House is the link to the importance that the Town of Concord placed on the role of local government in 1851.

B. Chronology of Development and Use

Summary of Major Phases of the Town House

The development and use of the Town House follow the phases outlined in the previous section: the building of the 1851 Town House, the building of the 1879-80 rear addition, the interior remodeling in 1930, the changes after World War II, and the major accessibility, services and fire safety projects of the past thirty years.

⁸ Kussin designed the house of Wayland M. Minot in Cambridge, Massachusetts, which was featured in the March 12, 1924 publication of *The American Architect*. The Tudor style house is built with a rough textured plaster exterior.

1850-52: A Town House “Both Desirable and Essential to the Prosperity of the Town”

Article 13 of the April 1850 Town Meeting Minutes reported the findings of the committee appointed to look into the matter of building a Town House “...the want which has long been felt in this town...”⁹ The critical need was for a place to hold public town meetings, as well as providing a space for other public meetings and functions. The committee recommended that it would be in the town’s interest (and certainly would be more economical), to house a schoolroom for the Centre School in the same building.

The committee considered three lots and unanimously recommended the lot to the south of the Middlesex County courthouse site. The proposed site for the Town House was described as a rectangular lot, ninety-five feet in the front on the Square and one hundred and sixty feet deep. The report also noted that the lot was “...shaded by handsome trees...large enough to afford good play-ground for the children” and “...situated on the most quiet and least travelled part of the Square...” The central location on Monument Square, next to the new courthouse, and the higher elevation of the proposed lot would all give the Town House the prominence befitting an important civic building. The estimate for the building and the land was for at least ten thousand dollars.

The town accepted the committee report and recommendations by a unanimous vote and proceeded to elect five prominent citizens – Nathan Barrett, John Cheney, F.R. Gourgass (town clerk and editor and publisher of *Concord Freeman*), Samuel Staples (who served over the years as jailer, sheriff, selectman, member of the state legislature, and director of state and national banks), and Colonel Cyrus Wheeler (a successful farmer) - to the new Town House Building Committee. The new committee members were immediately tasked with ensuring that the new building would provide a fire proof safe or vault for town records and rooms for the boards of the town officers and the School Committee.

Several months later, Henry David Thoreau produced two survey documents of the lot dated June 13, 1850: *Plan of the Town House Lot* (see Figure 4) and *Plan of the Court House Grounds and Adjacent Lots* (see Figure 5).¹⁰ The drawings show that the proposed lot for the Town House consisted of two adjoining rectangular parcels of similar size that split the lot into a northern and southern section, each abutting the Common. Elisha Fuller was recorded as the owner of the slightly larger northern parcel bordering the courthouse property (measured as 8,535.34 feet or 31.351 perches¹¹), and the southern half (measured at 7,279 feet or 26.736 perches), which also abutted the “Street to the Burying Ground”, belonged to John Keyes.¹²

There appear to have been several structures on the property that were sold and moved prior to the start of construction. The April 1, 1852 Town House Building Committee report records a small house purchased by Mary Rice for \$120.78, an old shed sold to F.R. Gourgass for \$18.50, and \$164.40 due from John

⁹ The Town of Concord initially sought to share space with the Middlesex County Courthouse which was to replace the courthouse building on Monument Square which burned down in 1849. The Town of Concord’s offer to work with the county to build a Courthouse which would include a town hall was rejected by the County Commissioners. The new Middlesex County Courthouse was completed the same year as the new Town House.

¹⁰ The April 1, 1852 Town House Building Committee recorded payment made to “H.D. Thoreau, surveying lot, \$4.00.”

¹¹ According to the Getty Institute *Art & Architecture Thesaurus Online*, a perch is defined as a unit of measure of length equal to 16.5 feet and a unit of measure of area of equal to 30.25 square yards.

¹² For Henry David Thoreau’s survey notes, see Figure 6.

Shepard Keyes for “a building sold.”¹³ The building sold by John Shepard Keyes may have been the forty by thirty foot building described and mapped by Edward Jarvis in his 1882 manuscript *Houses and People in Concord, 1810-1882* (for Jarvis’s map of Concord estimated to represent Concord between 1810-20, see Figure 1). According to Jarvis’s account, the building was sometimes used as a store in the early nineteenth century by John Thoreau and Captain Daniel Smith; starting in 1825, Luke Robbins used the building for several years to make harnesses and carriage trimmings. The building was later sold to John Keyes (the father of John Shepard Keyes), and was finally sold at auction and moved prior to the construction of the Town House.¹⁴ The 1830 Hales Map (see Figure 2) and Barber’s 1839 engraving of Monument Square (see Figure 3) also depict several structures to the south of the courthouse which may have been present when the two parcels were purchased in 1851.

By late summer of 1851, the two parcels had been purchased and construction had started on the new Town House. In a special town meeting, and despite a motion to build more economically in wood, the town approved construction of a substantial brick building with sandstone trim and a slate roof. Building progressed rapidly enough so that in November 1851 the town meeting could be held in the new assembly hall.¹⁵

On April 1, 1852, the Town House Building Committee reported that the town had made payments totaling \$18,534.20 for the land, site preparation work such as filling old cellar holes, the Town House building materials and work, the privy, furnishings, and other costs related to the project. The committee estimated that another \$807.00 would be needed for various fences and partitions (the iron fence around the property, a partition fence for the front yard, and a screen and division fence for the privy) and for additional work to level the ground and walks. The biggest expense was the payment of \$12,783.23 to the contractors Adams & Bonney. The payments for the land amounted to \$1,950.00, furnishings cost almost \$2,000.00, and the architects Richard Bond and Charles Parker received \$578.00. (For a transcript of the Town House Building Committee accounting details, see Figure 7.)

The committee declared that the project had been a successful undertaking. And, perhaps to stave off any criticism of the costs which were almost double the April 1850 estimate, stated that “The work they think has been well done, and of excellent materials, and although the Building has proved somewhat costly, it is hoped that the town will be satisfied that they have got their money’s worth.”

The final Town House Building Committee report of March 7, 1853 detailed the money received from J.S. Keyes for the “old house,” additional borrowing from the Middlesex Institute for Savings and the final expenses for the iron fence (later records show that this was a cast iron fence), additional brick and stone work, painting, grading and miscellaneous work and items (see Figure 8.) The final cost of the Town House project was calculated at \$19,253.00. The following year, the Selectmen’s Report stated the value of the Town House at \$20,000.00.

¹³ The Town House Building Committee Report of March 7, 1853 states “...have received from J.S. Keyes for old house, \$170.00.”

¹⁴ The building on John Shepard Keyes’ property is described on the *Concord Historic Buildings Website* as his law office. The building was auctioned by the town, bought back by John Shepard Keyes, who then moved it to Monument Street where it still stands at the present day address of 15 Monument Street.

¹⁵ Sarah Chapin, *Entering Concord: A History of Public Affairs 1850-2000* (Hollis: Hollis Publishing Company, 2005), 2.

The 1853 report concluded with statements emphasizing the value of having the foresight to construct a durable and prestigious building that would serve the present and future needs of the Town of Concord. “The Committee were decidedly of the opinion, that the true interests of the town would be promoted, by erecting for a Town Hall, a large, handsome and durable building – one that would not only answer the purposes of the present day, but, also, one that would meet the wants of the generations that are to come after us...the Town Hall of 1851-52, will long stand, a monument of the forecast, enterprise and liberality of the present generation.” The Town of Concord voted to accept the report and thanked the committee for “the skill and fidelity with which they have discharged the duties assigned them.”

1850s – 1870s: The Town House to “Answer the Purposes of the Present Day”

At the time that it was completed, the first floor of the Town House held offices in the front rooms for town committees as well as the town clerk, tax collector and treasurer; two school rooms were located in the back. The Town Hall (assembly hall) was on the second floor along with a room in the southeast corner for the Social Library and its law, parish, and agricultural society collections. The building also contained a safe for Town Records.¹⁶

The Town Hall (assembly hall) was made available for public meetings and events in November of 1851, and the Town Hall and Town House immediately became the center for educational lectures and debates on issues of the day, cultural and social events, various entertainments, political meetings, and the celebration of important town and national events. The first recorded event was a temperance meeting booked by Dr. Josiah Bartlett for November 12, 1851. Henry David Thoreau and Ralph Waldo Emerson gave lectures. Recent immigrants from Ireland celebrated Mass in the 1850s and 1860s. John Brown spoke in the Town House in 1857 and again in May of 1859; on the day of his execution, December 2, 1859, a memorial service was held in the Town Hall observing “The Martyrdom of John Brown”. The Town House played an important role in the Civil War efforts as a center for enlistment and as a place to hold meetings and fund raising events for the Soldiers Aid Society. And in 1865, a dance was held in the Town Hall to celebrate the surrender of General Robert E. Lee. The 1873 dedication ceremonies for the Concord Free Public Library, the 1875 Centennial Celebration and decades of high school graduations were held in the Town Hall.

1852 Walling Map

The Concord Center inset of the 1852 Walling *Map of the town of Concord* shows the Town House building (labeled “Town Hall”) to the south of the courthouse, in an area with other important public and commercial buildings and private residences (see Figure 9). The property to the east of the Town House had a building that belonged to Mrs. Gleason. The County House, Jail and Middlesex Hotel stood on the other side of Monument Square, and across Bedford Street was the Universalist Church.

1856 Walling Map Image

Plans and drawings for the 1851 Town House have not been found. However, a detailed image from the 1856 Walling Map (see Figure 10), combined with information from the Town House Building Committee Reports and Town Reports, provides a picture of the building exterior and the site within the first five years of construction. The image can be assumed to be reasonably accurate as it is very similar

¹⁶ Concord, *Annual Report of the Town Officers: Reports of the Town Building Committee*, March 7, 1853. Chapin, *Entering Concord*, 3.

to a photograph of Bronson Alcott and a group of schoolchildren in front of the Town House that has been dated to the early 1860s photograph (see Figure 11).

The 1856 Walling Map image depicts a two story Italianate style three-by-five bay brick building standing on a graduated elevation and set farther back from the street relative to the courthouse next door. The building's dominant architectural features are the façade pediment with an oculus and the heavy cornice (both the façade pediment and cornice are ornamented with dentils); the round-arched, recessed center entry with large masonry door surround and an Italianate double door, and the belt course dividing the first and second stories. The prominent first story quoining which can be seen in the early 1860s photograph is not evident. The rectangular windows on either side of the entry are shown with three over three window sashes (which may not be correct as this is different from what is visible in an 1875 stereograph) and there are two small rectangular basement openings on either side of the front steps. The 1852 Town House Building Committee report listed a payment for "wire cloth for cellar windows". It is possible to make out that the right-hand second story window on the front of the building is arched, but there is little detail to the other openings. The foundation layer and the graduated front steps appear to be made out of light-colored, solid masonry.

The original masonry was identified by Ivan Myjer in 2006 as hard fired brick with Portland Connecticut Brownstone trim; limestone based pointing mortar was used for most of the building. Following a common mid-nineteenth century practice for Italianate style buildings, the bricks were set at a slight angle to make the joints appear thinner when viewed from below. Most of the brownstone units were set with the sedimentary bedding planes oriented vertically to highlight the grain and swirl patterns in the stone; this technique, known as "faced beading", was quite popular in the nineteenth century. The foundation and front steps were made of granite.¹⁷

Four chimneys can be seen in the image; the two larger ones are probably made out of brick. There are two narrow flues with what may be chimney pots and caps along the ridge. A tall, narrow chimney appears to be in the southwest section of the building, and a larger, wider chimney is shown at the rear of the building.

A simple metal railing fence set in a low masonry base separates the front of the property from the sidewalk along Monument Square; there is an entry to the path leading from the sidewalk to the front steps of the Town House that is framed by taller metal posts and protected by four contoured metal bollards that are slightly lower than the fence railings. The fence also runs from the front to the northwest corner of the building. The 1853 Town House Building Committee report noted that Adams & Company were paid \$725.09 for an iron fence which according to the 1852 report, was to be painted. The north section of the lot also appears to be fenced on three sides to create a type of corridor. Access is from the sidewalk and the opening appears to be protected by at least four contoured bollards similar to those at the head of the path to the Town House.

The Town House lot is open and appears to be covered with closely mown grass; there is a small tree between the Town House and the courthouse and trees can be seen in the rear of the building. A massive tree (most likely the elm tree erroneously referred to in some accounts as the "Whipping Elm") stands in

¹⁷ Ivan Myjer, *Concord, Massachusetts Town House: Exterior Conditions Assessment and Treatment Recommendations* (Arlington: Ivan Myjer Building and Monument Conservation, November 2006).

the Square just beyond the sidewalk and is surrounded by what could be small benches. There may also have been elm trees along Bedford Street to the south of the Town House; in 1854-55 the Superintendent of Public Grounds had set out a "...row of large elm trees...on the line of Bedford Street, as far as the Cemetery lot, and securely boxed to protect them from injury."

A slightly raised sidewalk separates the front of the Town House property from Monument Square. Posts are placed at intervals between the edge of the sidewalk and Monument Square. Monument Square was undergoing changes at this time as well. In his 1856-57 report, the Superintendent of Public Grounds mentions planting elms and other trees in the Square in front of the Town House "securely boxed" which "...if permitted to grow, they will prove a great comfort and ornament in this sandy and dusty place."

The 1852 Town House Building Committee report also identified payments for "railing to door steps," a partition in the cellar, "brick and cement for drains," and "half cost of privy." Since no other payments were listed for the privy, perhaps this was a shared expense (and facility) with the courthouse next door.

Early 1860s, Photograph of Alcott and Schoolchildren in Front of Town House

More architectural details come to light in an early 1860s photograph of Amos Bronson Alcott standing with a group of schoolchildren in front of the Town House. The first story quoins and lighter stone foundation are clearly visible, as are the arched second story windows on the front façade (West Elevation) and South Elevation. The first story windows on the front (West Elevation) have horizontal lintels, while the second story windows appear to have 8-over-8 sashes, and arched hood moldings. There is a small set of steps with a metal railing leading up to a center doorway on the South Elevation with two long rectangular windows on either side. Two rectangular basement openings are visible; a possible third opening is obscured by the steps. Downspouts run down each end of the South Elevation. And what appeared to be a single narrow brick chimney in the southwest section of the building now looks like two narrow brick chimneys built closely together.

There is no evidence of white paint on the cornice or pediment. (The only elements that appear to be painted white are the window casings on the front or West Elevation.) This would support the theory that the cornice, brackets, soffits and fascia were painted with brown sand paint to resemble stonework which would have been a popular treatment at the time for Italianate buildings that incorporated real sandstone.¹⁸

The iron fence can be seen to enclose the area in front of the Town House. There is also a fence running from the southwest corner of the building and a fence is visible in the rear of the property separating the Town House from the residence in back. There are several trees, most likely elms, in Monument Square in front of the Town House. Evergreens can be seen on the northern boundary of the property and to the rear in the northeast corner. We know from the Superintendent of Public Grounds reports that between 1858 and 1859, the town had started work to enclose the grove in front of the Town House with a "good substantial fence with stone posts" and that by 1860 "a strong and substantial fence has been put around the Green in front of the Town Hall at a cost of about \$70..."

1875 Beers Maps and Stereographic Image

The 1875 Blaisdell Centennial Map and the F.W. Beers Map show a Concord Center that is expanding with more buildings, businesses and residences. The Town House is identified as the "Town Hall" on

¹⁸ Ivan Myjer's 2006 assessment uncovered traces of what appeared to be brown sandstone paint in the cornice area.

both maps; and on the Beers Map (see Figure 12) is situated in the middle of the lot and is surrounded by green space. The Common is identified and appears as a long green space in the middle of Monument Square between Bedford Street and Monument Street. The Middlesex Insurance Company now owned the former courthouse building to the north; the residence in back of the Town House has expanded and is owned by P. Kelly. The church across Bedford Street is now a Roman Catholic Church (St. Bernard's) and no longer faced the South Elevation of the Town House, having been turn to face Monument Square in 1865.¹⁹

Significant changes are not evident in an 1875 stereographic image of the Town House (see Figure 13). However, there are more visible details of the front façade (West Elevation) windows; the first story windows appear to be eight over eight sash windows, the second story windows appear to be round-headed eight over eight sash windows, and the arched hood moldings can be seen more clearly. The only visible features that appear to have been painted white are the window casings on the front façade (West Elevation) and South Elevation.

Three chimneys are partially visible: the two on the ridge and one in the rear. The two chimneys in the southwest section may have been hidden by the tree in the foreground. The streetscape does not seem to have changed much. The raised sidewalk and posts are still there, as are the elms. The elm to the southwest of the Town House had a small white sign with the mileage to Bedford and Billerica.

Town Records

In the first decade of use, the major expenses for the Town House were the cost of heating (supplies of coal and wood, as well as repairs on the furnace), and paying someone for the “care of Hall and moving seats” and care of the schoolrooms. While candles appear to have provided most of the indoor lighting, kerosene lamps were purchased for the Town Hall and library between 1861 and 1862, followed by more purchases in 1862-63. Minor repairs are mentioned for the roof, slate, windows, and fence. In 1862-63, the Town of Concord took out \$3,000.00 insurance policies for the Town House from each of the following: Peoples' Mutual Fire Insurance Company in Worcester, Charlestown Mutual Fire Insurance Company in Charlestown, and Traders' and Mechanics' Insurance Company in Lowell.

In the winter of 1860, the growing library was extended to include part of the former intermediate school room.²⁰ The library continued to expand and finally moved out of the Town House and into the former courthouse building in 1868.

The more serious problem of the roof, which had been leaking for several years, was addressed in 1864-65. T. Tilson & Son, Boston was paid \$32.34 for “repairs on roof about the chimneys, slates, zinc, &c.” and L.A. Surette was paid \$8.34 for “zinc, cement, sheet lead, boards, &c. for repairs of roof.”

During that same period, it was noted that “the fence about the house needs repairing; many of the pales are gone, and some of the sections are broken” which presented a “very shabby appearance.” However, as the foundry in Lowell, MA, where the castings were made had been destroyed by fire, the town was concerned about the “considerable expense” of having new patterns made. The replacement may have

¹⁹ Chapin, *Entering Concord*, 5.

²⁰ Chapin, *Entering Concord*, 4.

cost more than the town was willing to spend as the fence appears to have been removed sometime between 1875 and 1895 (see Figure 13 and Figure 14).²¹

Expenses in the late 1860s included the purchases of stoves, alterations and repairs to schoolroom (perhaps to reclaim the space vacated by the library), and the building of a bulkhead. In 1870-71, Cyrus Benjamin & Son built a new chimney for \$21.35 and more repairs were made to the roof. During that time, the school moved out and the Armory, described as the equal of any outside the city of Boston, moved into the refitted schoolrooms.²²

Minor repairs continued on the Town House and several purchases were made to improve the comfort, convenience and enjoyment of the building. In 1872-73, Magee Furnace Co. provided two new furnaces for \$320.00, J.C. Sanborn received \$214.15 for “setting furnaces, tin pipe, registers, new smoke-pipe, &c.”, and there were additional charges for mason work, lime, sand and covering stones. The larger furnace replaced the cracked and leaking existing furnace and the smaller allowed more areas to be heated “...so that with the two, the Armory, lower Town Hall, the Selectmen’s and Town Clerk’s rooms and the front entry-way could all be heated.”²³ The following year, purchases of a piano and Cleveland Non-Explosive lamps are recorded. “Fly-doors” were purchased from John O. Haskell in 1877-78 for \$31.19.

The early 1870s saw several significant developments in Concord and the area around the Town House. In 1871, the Town of Concord installed the first street lamps (oil lamps). These proved to be very popular and a year later it was reported that “the luxury of street lamps is so much enjoyed, that the temptation is to erect and maintain as large a number as the town’s appropriation will permit. Even this good rule has been exceeded, and still the demand is for more lamps.” The selectmen examined the question of what to do about the future erection and maintenance of guide-posts, and what, if anything, to do with the existing granite guide-posts. The superintendent of Public Grounds reported the appearance of “the canker-worm” in the elm trees and paid \$11.85 to ink the affected trees in 1872-73. The 1873-74 Road Commissioners’ reported grading walks and covering them with concrete “except where abutters preferred to retain brick” and taking up street crossings to substitute concrete. A concrete crossing “was extended across the square to the Town Hall.” Water pipes apparently reached Monument Square in 1874²⁴; the Town House had water by 1878 as the 1878-79 Town House expenses included \$16.50 for water rates.

1879-80 Rear Addition: “Improvement of Town Hall”

Of greater importance to the Town House building and leading up to the construction of the 1879-80 rear addition, were a number of issues with the 1851 building. The 1871-72 Town Report stated that “a thorough renovation from cellar to attic was needed to make the building conform to the notions of cleanliness...” with specific mention of the large amounts of water which had leaked through the roof and through the foundations into the cellar, and the fact that the Town House’s four drains were found to be “entirely closed.” The report also identified two major deficiencies in the existing structure: the lack of proper toilet facilities (particularly for women and especially critical when the Town Hall was used for public gatherings and events) and the need for a separate entrance for speakers using the Town Hall

²¹ Repairs to the fence were noted in the *Annual Report of the Town Officers*, 1869-70, 1874-75 and 1876-77. “Brimstone for fence” was recorded in the *Annual Report of the Town Officers*, 1880-81.

²² Fred A. Tower. *Concord Town House: some notes on the building and its use*. (Typescript, 1950), 5.

²³ Concord, *Annual Report of the Town Officers: Repairs of Town House*, 1872-73.

²⁴ Chapin, *Entering Concord*, 6.

platform so that they would not need to walk through the hall and audience to reach the platform. The report proposed "...erecting an addition to the rear end of the building, containing at least two rooms and staircase, with suitable water and other closets, dressing-room, &c., ...devoting its use exclusively to females on social occasions. This arrangement, with a suitable entrance from the upper room of the addition to the main hall, would give the desired private entrance for public speakers, and persons occupying the platform..."

In 1877-78, the town appropriated \$1,500.00 for the "improvement of Town Hall" and was forced to put the question of "any addition to or alterations in its Town House" to a town vote the following year after the State Inspector of Factories and Public Buildings ordered the town to construct a stairway in the rear of the Town House for safety reasons (Warrant, Article 13 in the 1878-79 Town Report). The 1879-80 Committee for Enlarging the Town House report stated that the town paid a total of \$3,501.00 for the addition: \$3,306.65 to "Messrs. Foster & Dutton, of Maine", \$165.60 to the architect (identified elsewhere as George B. Thayer and who was apparently owed an additional \$34.40 which the town refused to pay "for want of authority"), and \$28.75 for advertising for proposals. The report does not provide much detail about the addition, except to state that "upon examination of the drawings it was thought advisable to add two feet to the dimensions of the structure from front to rear, and to change the doorway from the side to the rear, thus saving one turn at a right angle in the stairway."

A new furnace, purchased from Walker & Pratt Manufacturing Company for \$160.55, allowed immediate use of the new addition.²⁵ A platform (\$72.46), chandeliers and lamps (\$28.89), furniture (\$39.19) and "Newell" posts (\$22.12) were bought; most likely to furnish the new addition. The town paid C.S. Parker & Sons \$58.03 to repair the roof and Dearborn Bros. received \$21.81 for topping chimneys; it is unclear whether this work was related to the new addition.

The 1887 Sanborn Map shows the Town House as a brick building located in Block 3. The notations on the 1851 building identify the structure as having two-and-a-half stories, a wooden or frame cornice (which extends to the addition), slate roof, and four window openings on the first and second floors.²⁶ The Armory is shown on the first floor, the Town Hall on the second floor, and the Dance Hall on the third floor (this appears to have been an error; the 1892 Sanborn Map identified the Dance Hall as being on the second floor). The lower two story rear addition has either a slate or tin roof, a window opening on the first and second floors, and a small central projecting wooden 'porch' or entry on the East Elevation. There is a central opening between the Town House and the rear addition. Three small structures are shown in the northeast corner of the lot: a single story rectangular brick building marked "W.C.", a single story square wooden building, and a two story wooden building with either an outside staircase or fire escape that is identified as the Hose House. The Middlesex Mutual Fire Insurance Company had its offices on the first floor of the building to the north, with the courthouse on the second and third floors. To the rear (east of the Town House) was a two story dwelling with side and rear ells. Four inch water pipes run along Bedford Street and Monument Street.

There are minor changes in the 1892 Sanborn Map; the Dance Hall is now identified as being on the second floor, the single story rectangular brick building is no longer marked "W.C.", and the Hose House

²⁵ Chapin, *Entering Concord*, 7; *Annual Report of the Town Officers*, 1879-80.

²⁶ The Sanborn Maps often only show the window openings for one main elevation, in this case the North Elevation, in which case it can be assumed that the opposite elevation has similar window openings.

appears to have an exterior stairway on the West Elevation. The Armory is still shown as located in the Town House, however, the Armory had moved to a new location in 1887. (See Figure 17 and Figure 18.)

The circa 1885-1895 Munroe View of Monuments Square photograph captures the West and South Elevations of the Town House and the unobtrusive rear addition and shows that the rear addition was lower than the 1851 Town House building and that it was designed to appear as an integral part of the original building (see Figure 14). Architectural details from the 1851 Town House such as the belt course, lighter foundation, first story quoining, and similar window openings and surrounds for the single window on each story, have been carried over to the addition to create this unified appearance. Four chimneys are visible on the Town House structure: two narrow chimney pipes with caps on the ridge, a large narrow rectangular brick chimney with vents that appears to be at the center of the rear of the Town House, and a tall narrow brick chimney close to the cornice line between the two westernmost windows on the South Elevation. There is no evidence of white paint used on the building's prominent architectural features. The entry door appears as a dark, almost reddish, brown color. As mentioned earlier, the iron fence has been removed. This image, and two others dating from the same period (see Figure 15 and Figure 16), show us orderly and well-tended streets lined with rows of elm trees. The common and circle are encircled with open post fences and have become more park-like with green space and trees.

1897-1930: Town House Transition to Town Office Building

From the late 1890s to 1930, information from the Sanborn Fire Insurance Maps and the Town Records illustrate the shift from a shared town government and community space to a building dedicated to town offices and business. The rear addition especially appears to have undergone a number of exterior and interior configuration changes during this period. The records also show increasing modernization of the Town House and reflect a greater emphasis on fire safety.

Based on the 1897 Sanborn Map (see Figure 19), several significant changes were made to the 1851 Town House and the 1879-80 rear addition. The number of window openings shown on the North Elevation of the 1851 structure changed from four to three on the first and second stories, the Armory and the Dance Hall are gone, and the building is now identified as Town Offices. The structure is noted as being two stories instead of two-and-a-half stories. Two new window openings are shown for the first and second stories on the East elevation of the rear addition and the wooden 'porch' or entry is gone. Additional information is provided about the wall thickness for the North, South and East elevations. The numbers on the 1897 Sanborn Map are difficult to make out, they appear to show sixteen inches for both stories (and in fact are shown as sixteen inches in the 1903 map). However, the Sanborn Maps from 1918 and onwards clearly identify the wall thicknesses for both stories as being twelve inches. So the notation of sixteen inches appears to have been an error. The 1897 Sanborn Map shows the three outbuildings as being located on the courthouse lot and shows another small single story wooden outbuilding that had been added on the northeast corner of the Town House lot.

Several changes are mentioned in the 1901 Town Records which are not shown on the Sanborn Maps. The toilets were connected to the new sewer and the "sanitary" (public bathrooms) was moved from the back of the Town House to the playground. An iron platform was installed on the North Elevation to

allow scenery to be placed in the assembly hall.²⁷ The assembly hall ceiling was redecorated by C.W. Strauss for \$335; Mr. Strauss and Newton Mackintosh had executed the second redecoration in 1893.²⁸

The only changes shown on the 1903 Sanborn map are to the outbuildings (see Figure 20). There are now two structures on the courthouse lot; the single story building closest to the Town House lot is gone and the two story structure is labeled “Repair Shop for Town”. The 1909 Sanborn Map shows the identical structure for the 1851 Town House and the 1879-80 rear addition, but indicates that the building had steam heat,²⁹ electric lights,³⁰ and “chemical extinguishers”, and that the height of the building was forty feet to the eaves. (See Figure 21).

In 1910, fire escapes were placed on the Town House. According to the Town Reports of 1910-11, Smith & Lovett installed fire escapes for \$1,061.87. However, the plan for the installation did not extend the fire escape to the gallery, so work was done that connected “two windows on either side of the main hall and one window on the north side of the gallery” for an additional cost of \$461.87. The metal rail fire escape can be seen on the South Elevation in a 1910 image by Towler (see Figure 22) below the third and fourth windows from the left on the second story. A stair leads to the east and the windows above the fire escape have been shortened by being bricked in at the bottom. The image also shows that the front stair railings have been replaced by masonry walls which appear to be smooth on inside and rusticated on outside and which end in small lamps on slender posts at the bottom of the steps. Five openings are clearly visible in the elevated basement on the South Elevation. The roof is obscured by tree branches, so only one of the ridge chimneys with chimney cap is visible. There is no clear evidence of white paint being used on the exterior. Much of the first story façade (the West Elevation) and some of the second story are covered with a type of vine. There are small evergreens and shrubs near the southwest corner of the building, low squared off hedges run along the edge of the lot bordering Monument Square and Bedford Street, and utility poles can be seen on the north side of the Town House.

Several accounts mention that public toilets (or “sanitariums”) were opened in the back of the Town House. The men’s entrance was on the North Elevation and the women’s entrance was next to the rear entrance (East Elevation) to the buildings.³¹

Between 1910 and 1913, new fire safety regulations went into effect and the assembly hall was declared unsafe for the staging of theatrical productions. The minimum estimate to bring the assembly hall up to

²⁷ A hinged window is mentioned in connection with the platform, perhaps this was used as the point of access.

²⁸ Daniel Chester French had proposed that the assembly hall walls and ceiling be decorated; Fred A. Tower states that French provided “valuable suggestions and advice” for the 1893 redecoration (Fred A. Tower, *Concord Town House: some notes on the building and its use* (Typescript: 1950), 7.

²⁹ The 1901 *Annual Report of the Town Officers* recognized that the Town House had become “much more of an office building...” and “that it must be kept warm all the time...” In addition to town board and committee meetings, “...the town clerk, auditor, electric light manager, water-works superintendent and others use the building pretty constantly.” The solution was to have Fred E. Poor of Concord Junction install a steam heating plant at the cost of \$2,630.

³⁰ The Town House interior was wired for electricity in 1900 and the old kerosene lamps were replaced with electric lights following the establishment of the Municipal Light Plant.

³¹ Chapin, *Entering Concord*, 13. Tower, *Concord Town House*, 7.

code was \$1,500.00 which the town was unwilling to spend at the time. Theater productions moved to venues which met the fire codes, such as Monument Hall.³²

A 1918 image (see Figure 24) clearly shows the façade or West Elevation. The first story 8-over-8-sash windows, the second story round-headed 8-over-8 windows and the oculus in the pediment appear to be the same as the current windows. The features such as the fire escape, the stairs, the hedges and plantings do not appear to have changed from the 1910 image. More details of the fire escape can be seen and the design does not appear to be the same as the present day fire escape on the North Elevation. There is still no evidence of white paint being used on the exterior. However, the vines have been removed and a narrow brick chimney with a chimney cap and two rectangular vents is visible in the southwest section of the building.

The 1918 Sanborn Map notes that the Town Hall offices are on the first floor of the 1851 Town House and that the hall itself is on the second floor (see Figure 23). The map also identifies several major changes to the 1879-80 rear addition. A wall divided the first story into half with a water closet (“WC”) in the northern section and the Lockup in the southern section. There were now two second story openings with doors that connected the two sections of the building. The two outbuildings are now shown on the Town House lot; the single story structure is identified as “Auto.” (an “Auto House” or garage), while the two story structure is the “Town Auto & Repair Shop”. And the wall thicknesses now read as twelve inches.

In the 1927 Sanborn Map (Figure 25), fire escapes appear on the back half of the North and South Elevations. It is not clear why these did not appear on the 1918 Sanborn Map. The 1879-80 rear addition again has a small, central single story projecting wooden ‘porch’ or entry with a slate or tin roof on the East Elevation. The configuration of the first floor of the rear addition has changed; walls divided it into three sections; the southern section is identified as the Lockup and no information is given for the other two sections. There are now three openings between the Town House and the rear addition; although there is no notation, these were most likely on the second story. The only window openings noted are the ones for the first and second story of the North Elevation of the rear addition. A single story, square wooden outbuilding has been added directly to the west of the two shown on the 1918 map and the two story structure has a single story side addition; all three structures are identified as “Auto Houses” (“A.”). There must have been changes in the town water system between 1918 and 1927, as the water pipes underneath Bedford Street were noted to be eight inches.

1930: Town House Remodeled to Accommodate the Court

In 1930, the District Court of Central Middlesex³³ was forced to move out of the space in the Middlesex Insurance Company building. To avoid the District Court moving out of Concord, the selectmen voted unanimously in a special Town Meeting on March 31st to appropriate \$13,200.00 to renovate the assembly hall to accommodate the court. By this time, the assembly hall was rarely used as “...Town Meetings had long since outgrown it, and had been transferred to the Veterans Building or the State

³² The town did take other fire safety measures such as lining chimneys with terra cotta and “fire stopping” walls.

³³ Also commonly known as the Concord District Court; the formal name is the Trial Court of Commonwealth, Concord Division.

Armory. Entertainments, plays, concerts and lectures had abandoned it for the ground floor auditoriums of other locations...³⁴

The total cost of the remodeling effort came to \$14,096.34: \$11,724.09 for the contractor John J. Bent, \$1,280.39 for the local architect William F. Kussin, \$505.05 to Carter Furniture for linoleum, and other expenses for electrical work, hardware and the Sewer Department. With the exception of a room in the northwest corner reserved for the Board of Selectmen for the Board's regular meetings and small public hearings,³⁵ the remodeled second floor space was leased to the court. The alterations were completed in late August of 1930 and on September 1st the court began sessions in the remodeled space.³⁶ After eighty years of separation, the Concord Town government and the courts were once again sharing a building.

Other changes were made to the Town House around the time of the remodeling. The Concord Building Department Record dated April 10, 1930 refers to miscellaneous changes made to the first floor, the removal of the Bedford Street (South Elevation) fire escape, and modifications made to the fire escape on the North Elevation. According to the Town Record of 1930 "The State Building Inspector condemned the fire escape on the north side of the Town Hall and it became necessary to renew bolts and paint it."

And the interior town office spaces saw a number of changes that year. The Town Record of 1930 documented that the Municipal Light Board, which had occupied space in the Town House since the early 1900s, moved out of the Town House to a new store on the Mill Dam. "Their offices in the Town House, which contained a vault adjoining, were assigned to the Water and Sewer Department. The front office formerly occupied by the Water Department was altered and assigned to the Town Clerk. The other former office of the Water Department was assigned to the Board of Public Welfare. The room formerly occupied by the Board of Public Welfare has no permanent assignment. At present it is being used for the distribution of surplus commodities to relief cases."

A number of changes were made in the 1930s that related to Police Department activities: a separate entrance was made on the south side of the building, a blue light was installed over the door on Court Lane, and a pistol range was set up in the basement. Other changes at this time included the addition of drains, downspouts and a catch basin at the rear of the building (East Elevation).

1947 – Present Day: "More Years of Useful Life"

Post-World War II Expansion

Immediately after the Second World War, town departments were growing and looking for additional space. The 1947 "Annual Report of the Special Town Plans Committee" stated that the building "is still in good condition and has many more years of useful life; consequently the town is justified in financing the repairs and reconditioning that will make the building more serviceable for offices." The Town of

³⁴ Tower, *Concord Town House*, 8-9.

³⁵ The room for the Board of Selectmen had one notable feature, the monumental 1920s painting *Concord Civil War Veterans* by Elizabeth Wentworth Roberts (Tower, *Concord Town House*, 8-9). Roberts founded the Concord Art Association in 1922. According to Sarah Chapin (*Entering Concord*, 21), the painting was restored in 1981.

³⁶ Concord, *Annual Report of the Town Officers*, 1930. Work may have started as early as April 10, 1930 as there is a Concord Building Department Record dated April 10th which refers to William F. Kussin as the architect of the alterations.

Concord also explored options for new construction and converting existing buildings to house the Police Department, District Court, and additional town offices and groups.

One account describes the situation in 1951 as follows: “The court was still occupying the court room and judge’s lobby area, but the selectmen were sharing with the building inspector, the board of appeals, the wiring inspector, and the planning board. The board of health moved to the town clerk’s office from the road department’s office. With the imminent arrival of the town manager came the need to find more office space.” In 1958, the building department, wiring board, planning board and board of appeals moved out of the Town House to new office on Keyes Road. The following year, the police department moved to new offices. And in the late 1960s, the District Court vacated the Town House.³⁷

In 1951, the exterior woodwork was painted. There is no mention of paint color, but in a December 1956 photograph (see Figure 28), the woodwork and the front doors are painted white. That same year, “hot top” was laid between the buildings on the north side. The firm of Bastille-Halsey Associates of 120 Tremont Street in Boston, Massachusetts, renovated the Town House in 1960. In addition to interior changes, the side door at the rear of the North Elevation was removed and the opening was bricked in. The estimated cost was \$131,700.00. Several years later, the eaves, gutters and downspouts on the South Elevation were repaired.³⁸

The 1948 Sanborn Map shows that the Town Hall, District Court and Lockup were still located in the Town House. There is now a bathroom or break room (“BR”) next to the Lockup. However, the fire escapes are not shown, the central projecting wooden ‘porch’ or entry on the East Elevation has been removed, and the only remaining outbuilding is the two story “Auto House” or garage with the one story side addition. A gasoline tank is shown to the north of the rear addition. The height of the building is noted as thirty-six feet to the eaves instead of forty feet. (Figure 26).

The roof appears to have been re-slatted in 1928 - an appropriation of \$1,500.00 was made to re-slate the roof in 1927 and a year later there is a reference to putting a new “cover” on the roof for that amount. The 1948 Sanborn Map shows the notation for a slate or tin roof. A memo from the Building Commissioner to the Assistant Town Manager dated 1989 identifies 1955 as the year that the slate on the main roof was first replaced with asphalt shingles, with the roof of the rear section being replaced in 1961. Re-roofing with asphalt shingles was also subsequently done in 1975, repairs in 1990, and recent roof projects for the main roof in 2002 replaced asphalt shingles, and in 2005 asphalt shingles on the rear addition were replaced.

Two 1956 photographs by H. Whittemore Brown (Figure 27 and Figure 28) are the earliest images found that show all of the exterior woodwork painted white. However, at least one major part of the façade had been painted white in 1928; the 1928 *Annual Report of the Town Officers* noted new front doors that had been painted white.³⁹ The photographs also show that the chimneys on the 1851 Town House are gone and there is a skylight near the center of ridge. The fire escape on the South Elevation is gone and the window openings have been restored. Several of the second story windows on the South Elevation have louvers. The border hedge and the elms are gone, but there are vines on first story of the façade (West

³⁷ Chapin, *Entering Concord*, 19-21.

³⁸ Concord Building Department Record, May 31, 1960; Chapin, *Entering Concord*, 19,21.

³⁹ Chapin, *Entering Concord*, 15.

Elevation), smaller evergreens in front of the building and a taller evergreen in the southwest corner of the lot. The paved driveway between the Town House and old courthouse building is visible. The 1958 H. Whittemore Brown image (Figure 29) shows that the walls on either side of the front steps had been removed and replaced by very simple railings. Telephone and electrical poles lined the street front. In a circa 1961 photograph (Figure 30), the elevated basement opening at the far left of the South Elevation appears partially closed up, a tall, narrow brick chimney with vents is visible on the rear addition, and there a new street lamp has been installed in front of the building. A 1970 color photograph (Figure 31) gives a clear image of the façade (West Elevation) and the white painted exterior woodwork, the brick walkway and stairs, as well as the plantings and landscaping. The entire first story and most of the second story façade is covered in vines. The vines still appear in a 1985 Memorial Day Parade image,⁴⁰ but are gone in images dating from 1995 and 1996.⁴¹

1980s - 2007: Accessibility, Comfort and Safety

In September of 1980, the Concord Building Department Records noted that Day & Ertman Architects of 181 West Street in Waltham, Massachusetts, had worked on renovations at the Town House. These changes included wiring and dividing the auditorium, painting the exterior and working on miscellaneous interior changes. Sarah Chapin's *Entering Concord* (page 21) identifies changes that were made in 1980 to make the Town House accessible to people with disabilities and to comply with state regulations: a designated parking stall and entrance ramp were created; doors, stairs, toilets, drinking fountains, control locks, thermostats, electrical outlets and door signs were redesigned. A hand drawn map of Monument Square published in 1995 shows that a handicap parking spot was located on the north side of the Town House and that there were wheelchair accessible crosswalks from Monument Square and across Bedford Street to the sidewalk at the southwest corner of the Town House lot. There is also a note that the public toilets in the Town House are wheelchair accessible.⁴² In 2009, Nashawtuc Architects, Inc. at 2 Lexington Road worked on a wheelchair lift and overhead canopy at the side entrance.⁴³

The Town of Concord voted to appropriate \$150,000.00 to upgrade the Town House heating and air conditioning system in 1997 and the funds were allocated in 1999.⁴⁴ PRA Architects PC of Cambridge, Massachusetts, replaced the HVAC system in 2000.⁴⁵ In 2008, a Certificate of Appropriateness was recorded for storm windows.

Another substantial investment was made in fire protection and safety in 2007. RDK Engineers installed a wet and dry fire protection system to bring the system up to code (the existing fire alarm system was over thirty years old) and installed a sprinkler system at the request of the Town of Concord to ensure a more comprehensive fire protection system.⁴⁶

⁴⁰ Sarah Chapin, Claiborne Dawes, and Alice Moulton. *Then & Now*. (Charleston: Arcadia Publishing, 2001), 75.

⁴¹ Bill Montague, *Concord Guidebook: Tourist Information for Concord, Massachusetts*. (Concord: Concord Mousetrap, circa 1995), 4. Anne Forbes, *Form B – Building: CON.302*. (Concord: Concord Historical Commission, 1996).

⁴² Bill Montague, *Concord Guidebook*, 5.

⁴³ Concord Building Department Report dated December 23, 2009. Concord Building Department Report dated March 19, 2010 records the Certificate of Appropriateness for the canopy.

⁴⁴ Chapin, *Entering Concord*, 22.

⁴⁵ Concord Building Department Report dated March 22, 2000.

⁴⁶ Concord Building Department Report dated June 6, 2007. RDK Engineers, *Concord Historic Town House*. The Concord Building Department Report also includes a fire escape and fire balcony affidavit dated May 25, 2011.

The Inventory Form B completed in 1996 provides additional information about the Town House. There is an image of the 1879-80 rear addition that appears very similar to what is there today: one window opening on each story of the South Elevation, window openings on either side of the rear entry door on the East Elevation (a long narrow double sash window to the left and two small rectangular windows to the right), and two chimneys (one to the left of the dormer on the roof over the rear entry and an exterior chimney on the North Elevation). (Figure 33 and Figure 34 show the East Elevation in 2012.) According to the form, the center rear chimney was removed sometime in the twentieth century. The form also identified several features on the North Elevation: a metal fire escape and ramp, and several modern doors.

The 2006 *Exterior Conditions Assessment and Treatment Recommendations* by Ivan Myjer identified that the roof was asphalt shingle and that painted galvanized steel gutters were both hung from the roof and supported by the wood cornice. The assessment also identified very few changes to the original masonry: several openings on the East Elevation appeared to have been bricked up with soft fired common brick and an arched window surround on the second floor of the North Elevation had been removed. It was also noted that the sidewalls and railings for the granite front steps were moved and reset at some point to make the stairs wider.

The Town House Today

The Town House continues to serve the local government of the Town of Concord. The building at 22 Monument Street currently houses the offices of the Town Clerk, the Town Manager, and several key administrative departments. The Assembly Room, Selectmen's Room and Hearing Room are also still used.

Bibliography

Primary Sources

Concord. *Annual Reports of the Town Officers*. 1851-1881, 1910, 1911, 1930.

Concord. *Building Department Records, Town House*. 1930-2012.

Forbes, Anne. *Inventory Form B – Building: CON.302*. Concord: Concord Historical Commission, November 1996.

Myjer, Ivan. *Concord, Massachusetts Town House: Exterior Conditions Assessment and Treatment Recommendations*. Arlington: Ivan Myjer Building and Monument Conservation, November 2006.

RDK Engineers. *Concord Historic Town House*. <http://www.rdkengineers.com/government/concord-town-house.cfm> [accessed September 13, 2012].

The American Architect and the Architectural Review. *House of Wayland M. Minot, Cambridge, Mass.* New York: Architectural and Building Press, Inc., 1924.

Secondary Sources

Chapin, Sarah. *Entering Concord: A History of Public Affairs 1850-2000*. Hollis: Hollis Publishing Company, 2005.

Chapin, Sarah, Claiborne Dawes, and Alice Moulton. *Then & Now: Concord*. Charleston: Arcadia Publishing, 2001.

Concord Art Association. *About Elizabeth Wentworth Roberts*. http://www.concordart.org/about/about_EWR.php [accessed October 18, 2012].

Concord Free Public Library. *Concord Historic Buildings Website: Town House Story*. <http://www.concordlibrary.org/scollect/BuildingHistories/TownHouse/index.html> [accessed August 12, 2012].

Massachusetts Historical Commission. *MHC Reconnaissance Survey Town Report: Concord*. Boston: Massachusetts Historical Commission, 1980.

Montague, Bill; edited by Christopher Roof. *Concord Guidebook: Tourist Information for Concord, Massachusetts*. Concord: Concord Mousetrap, circa 1995.

Morgan, Keith N., ed. *Buildings of Massachusetts: Metropolitan Boston*. Charlottesville: University of Virginia Press, 2009.

Tower, Fred A. (Fred Alonzo). *Concord Town House: some notes on the building and its use*. Typescript, 1950.

Withey, Henry F., and Elsie Rathburn Withey. *Biographical Dictionary of American Architects (deceased)*. Detroit: Omnigraphics, 1996.

Appendix B: Historic Photographs and Images

Barber, John Warner. *Central Part of Concord, Mass.* (Engraving of Monument Square), 1839. Concord Free Public Library.

<http://www.concordlibrary.org/scollect/buildinghistories/TownHouse/storyPages/barberEngraving.html>

[accessed August 12, 2012]

Brown, H. Whittemore. Wide-angle photograph. View of Monument Square and Main Street looking north, June 1956. Concord Free Public Library.

Brown, H. Whittemore. Wide-angle photograph. View of Monument Square looking east from the Mill Dam, December 1956. Concord Free Public Library.

Brown, H. Whittemore. Wide-angle photograph. View of Monument Square looking southwest from Town Hall, November 1958. Concord Free Public Library.

Card Stereograph of Town House, 1875. Concord Free Public Library.

Color Snapshot, circa 1970. Concord Free Public Library.

Gleason, Herbert Wendell. Photograph of the Town House, 1918. Concord Free Public Library.

Hosmer, Alfred. Photograph of the Town House Area, ca. 1885-1895. Concord Free Public Library.

Munroe, Alfred. Image of Activity in Concord Center, ca. 1885-1895. Concord Free Public Library.

Munroe, Alfred. View of Monument Square, ca. 1885-1895. Concord Free Public Library.

Towler, William H. Photograph of Town House, Monument Square, 1910. Concord Free Public Library.

Towler, William H. Wide-view, circa 1961. Concord Free Public Library.

Appendix C: Historic Drawings

Thoreau, Henry David. *Plan of the Court House Grounds and Adjacent Lots...June 13, 1850*. (survey number 7a; Concord Free Public Library Thoreau survey collection).

http://www.concordlibrary.org/scollect/Thoreau_surveys/7a.htm [accessed August 12, 2012]

Thoreau, Henry David. *Plan of the Town House Lot...June 13, 1850*. (survey number 7d; Concord Free Public Library Thoreau survey collection).

http://www.concordlibrary.org/scollect/Thoreau_surveys/7d.htm [accessed August 12, 2012]

Appendix E: Historic Maps

Beers, F.W. *County Atlas of Middlesex Massachusetts. From actual Surveys by and under Direction of F.W. Beers* [map]. 1875. Monument Square close-up. Scale not given. Concord Free Public Library

<http://www.concordlibrary.org/scollect/BuildingHistories/TownHouse/storyPages/beersMap1875.html> [accessed August 12, 2012]

Blaisdell, H.W. *Centennial map of Concord, 1775-1875* [map]. 1875. Scale not given. Norman B.

Leventhal Map Center <http://maps.bpl.org/id/12772> 8-12-2012 [accessed August 12, 2012]

Hales, John G. *Plan of the Town of Concord, Mass. In the County of Middlesex* [map]. 1830. Monument Square section. Scale not given. Concord Free Public Library

<http://www.concordlibrary.org/scollect/BuildingHistories/TownHouse/storyPages/halesMap.html> [accessed August 12, 2012]

Monument Square, 1810-1820, from a Map by Edward Jarvis. Concord Free Public Library.

<http://www.concordlibrary.org/scollect/BuildingHistories/TownHouse/storyPages/monumentSquareJarvisMap.html> [accessed August 12, 2012]

Sanborn Fire Insurance Map of Massachusetts: Concord (Middlesex County): August 1887, September 1892, May 1897, January 1903, December 1909, August 1918, May 1927, and May 1927/August 1947.

Walling, Henry Francis. *Map of the town of Concord* [map]. 1852. Concord Center inset section. Scale not given. Concord Free Public Library

<http://www.concordlibrary.org/scollect/BuildingHistories/TownHouse/storyPages/wallingMap1852.html> [accessed August 12, 2012]

Walling, Henry Francis. *Map of Middlesex County, Massachusetts* [map]. 1856. Scale not given. Norman B. Leventhal Map Center <http://maps.bpl.org/id/12690> [accessed August 12, 2012]

Figures

Figure 1 Monument Square, 1810-1820, from a Map by Edward Jarvis (Section). Image rotated 90 degrees counter-clockwise from the original. Courtesy of the Concord Free Public Library. Note: #58 Courthouse and #59 John Thoreau, Daniel Smith Store.....	26
Figure 2 Hales Map, 1830 (Section). Courtesy of the Concord Free Public Library.	27
Figure 3 Barber's Engraving of Monument Square, 1839. Courtesy of the Concord Free Public Library. 28	
Figure 4 Plan of the Town House Lot...June 13, 1850 (7d), Henry David Thoreau. Courtesy of the Concord Free Public Library.....	29
Figure 5 Plan of the Court House Grounds and Adjacent Lots...June 13, 1850 (7a) Henry David Thoreau. Courtesy of Concord Free Public Library.....	30
Figure 6 Thoreau's Field Notes, June 1850. Courtesy of the Concord Free Public Library.	31
Figure 7 Reports of Town House Building Committee April 1, 1852. Transcribed by Barbara Kurze September 6, 2012.....	33
Figure 8 Reports of the Town House Building Committee March 7, 1853. Transcribed by Barbara Kurze September 7, 2012.....	34
Figure 9 Walling Map, 1852 (Concord Center inset section). Courtesy of the Concord Free Public Library.....	35
Figure 10 Walling Map, 1856 (Section). Courtesy of the Concord Free Public Library.....	36
Figure 11 Alcott and Schoolchildren in Front of Town House, early 1860s. Courtesy of the Concord Free Public Library.	37
Figure 12 Beers Map, 1875 (Close-up). Courtesy of the Concord Free Public Library.	38
Figure 13 Card Stereograph of Town House, 1875. Courtesy of the Concord Free Public Library.	39
Figure 14 Munroe View of Monument Square, ca. 1885-1895. Courtesy of the Concord Free Public Library.....	40
Figure 15 Munroe Image of Activity in Concord Center, ca. 1885-1895. Courtesy of the Concord Free Public Library.	41
Figure 16 Hosmer Photograph of the Town House Area, ca. 1885-1895. Courtesy of the Concord Free Public Library.	42
Figure 17 1887 Sanborn Fire Insurance Map.....	44
Figure 18 1892 Sanborn Fire Insurance Map.....	45
Figure 19 1897 Sanborn Fire Insurance Map.....	46
Figure 20 1903 Sanborn Fire Insurance Map.....	47
Figure 21 1909 Sanborn Fire Insurance Map.....	48
Figure 22 William H. Towler 1910 Photograph of Town House, Monument Square. Courtesy of Concord Free Public Library.	48
Figure 23 1918 Sanborn Fire Insurance Map.....	49
Figure 24 Gleason Photograph of the Town House, 1918. Courtesy of the Concord Free Public Library. 50	
Figure 25 1927 Sanborn Fire Insurance Map.....	51
Figure 26 1948 Sanborn Fire Insurance Map.....	52
Figure 27 H. Whittemore Brown, View of Monument Square and Main Street looking north, June 1956. Courtesy of the Concord Free Public Library.	53
Figure 28 H. Whittemore Brown, View of Monument Square looking east from the Mill Dam, December 1956. Courtesy of the Concord Free Public Library.	53

Figure 29 H. Whittemore Brown, View of Monument Square looking southwest from Town Hall, November 1958. Courtesy of the Concord Free Public Library.	53
Figure 30 William H. Towler wide view, circa 1961. Courtesy of the Concord Free Public Library.....	54
Figure 31 1970 Photograph. Courtesy of the Concord Free Public Library.	54
Figure 32 Town House, West Elevation, August 18, 2012. B. Kurze.	55
Figure 33 Town House, East Elevation, August 18, 2012. B. Kurze.	56
Figure 34 Town House, East Elevation, August 18, 2012. B. Kurze.	57

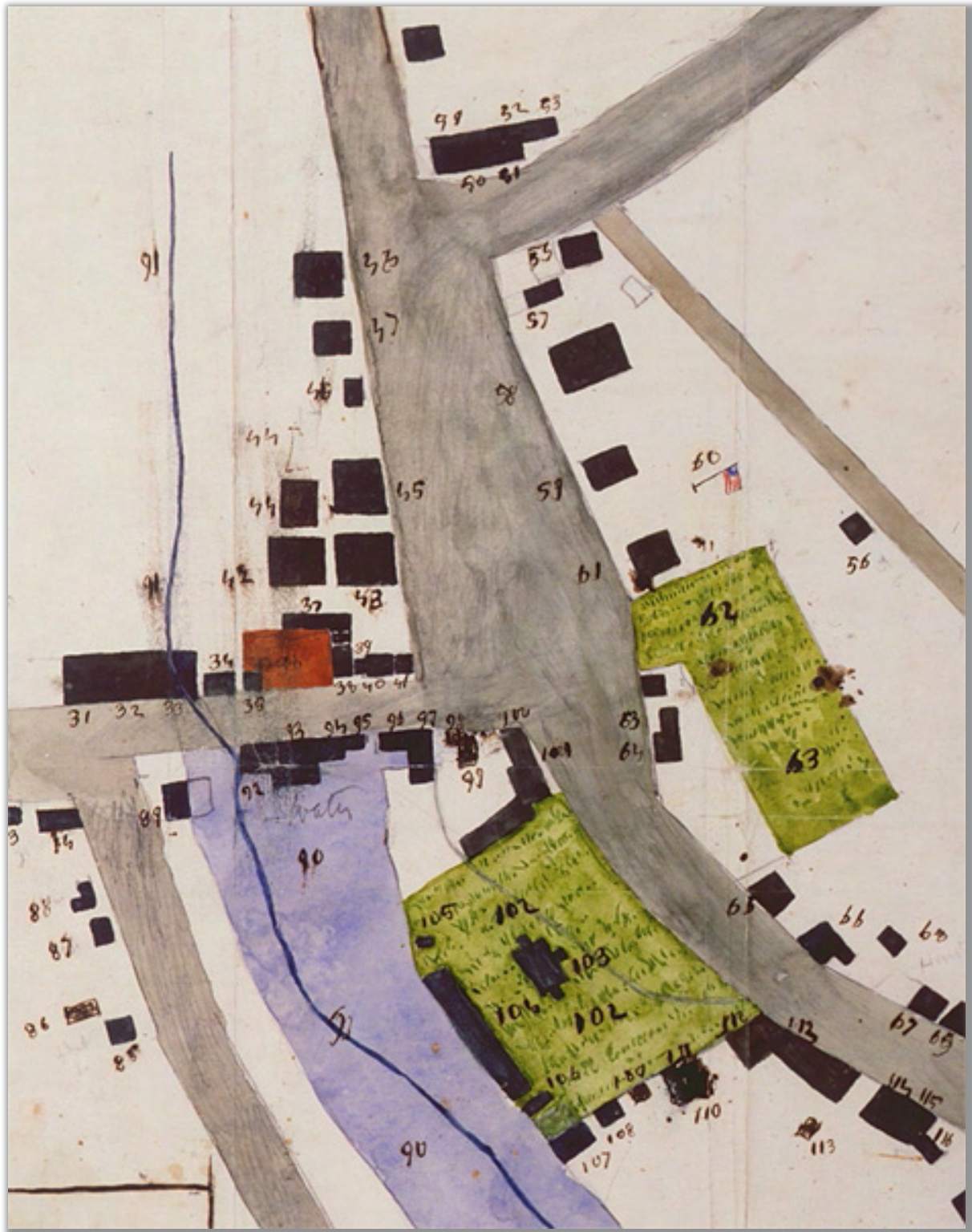


Figure 1 Monument Square, 1810-1820, from a Map by Edward Jarvis (Section). Image rotated 90 degrees counter-clockwise from the original. Courtesy of the Concord Free Public Library. Note: #58 Courthouse and #59 John Thoreau, Daniel Smith Store.





Drawn by J. W. Barber—Engraved by J. Downes, Worcester.

CENTRAL PART OF CONCORD, MASS.

The above is a northern view in the central part of Concord village. Part of the Court-House is seen on the left. Burying-ground Hill (a post of observation to the British officers in the invasion of 1775) is seen a short distance beyond. The Unitarian Church and Middlesex Hotel are seen on the right.

Figure 3 Barber's Engraving of Monument Square, 1839. Courtesy of the Concord Free Public Library.

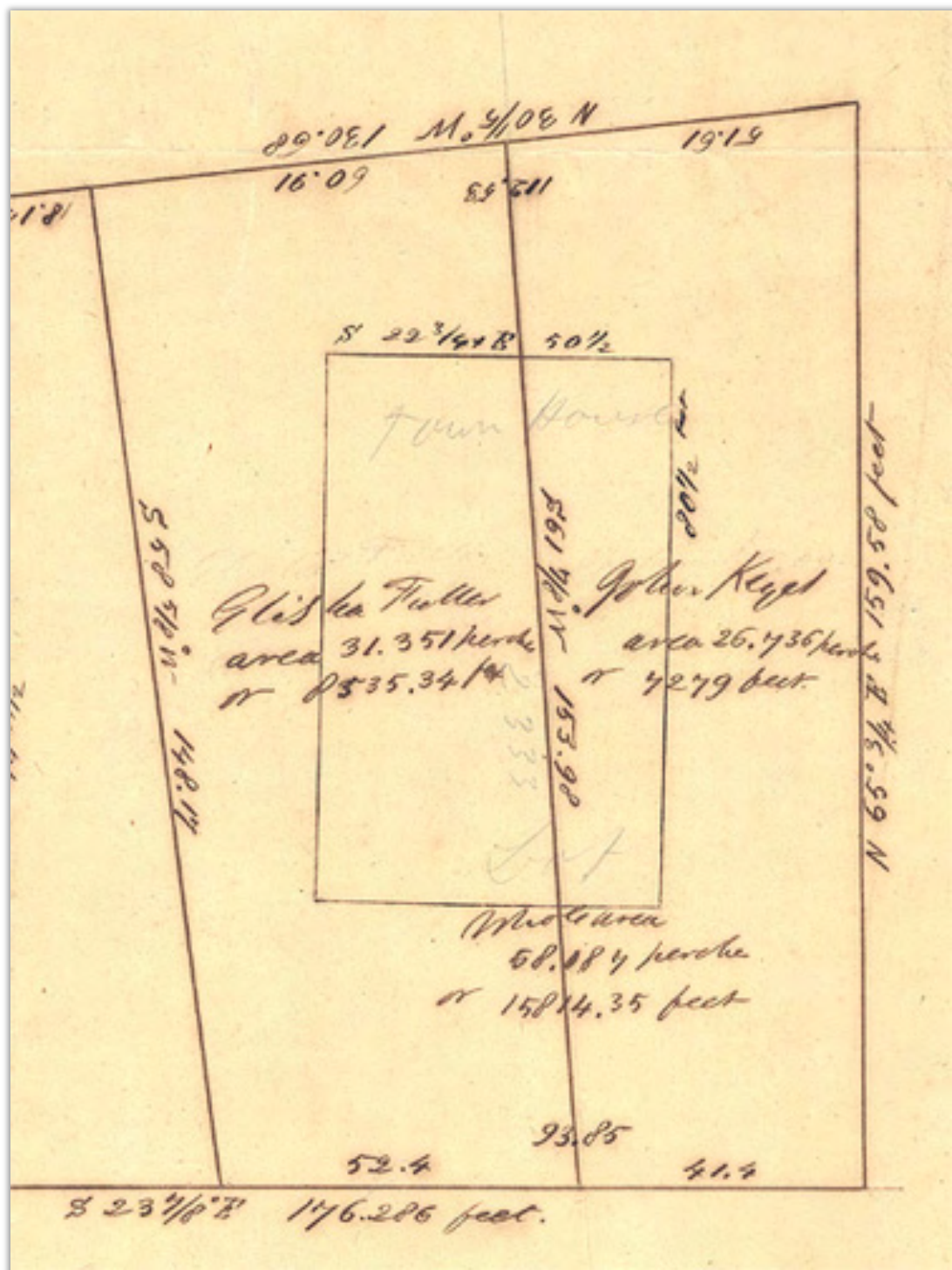


Figure 5 Plan of the Court House Grounds and Adjacent Lots...June 13, 1850 (7a) Henry David Thoreau. Courtesy of Concord Free Public Library.

Court-House & Town-House
Lots &c
Surveyed June 13th 1850

AB N 65³/₄ E 2.418 ch. or 159.588 feet
 BC N 30¹/₂ W 1.98 " 130.68
 B B' .782 51.612
 B B" 1.705 112.53
 B' I" S 51¹/₈ W 2.333 ch 153.978 ft
 B" I' S 58⁵/₈ W 2.245 " 148.17
 CK N 34¹/₂ W .978 or 64.548 | K I S 58³/₈ W 2.041 | 134.705
 KG or CK continued 1.076 56.016
 CD N 59³/₈ E 2.817 or 185.922
 DE N 11³/₄ E .555 " 37.29
 EF N 79¹/₂ W 1.632 107.712
 FG N 71¹/₄ W 1. 66.
 GH S 51⁵/₈ W 2.30 151.80
 HI S 17¹/₂ W 1.50 99. front of fence
 offset to the right
 at 10.89 feet offset 5.28
 23.1 7.656
 35.178 8.25
 47.52 8.25
 59.268 7.656

Figure 6 Thoreau's Field Notes, June 1850. Courtesy of the Concord Free Public Library.

Reports of the Town House Building Committee

Concord, April 1, 1852.

Cash borrowed at sundry times of the Mid. Inst. For Savings	\$ 18,450.00
With cash rec'd of Mary Rice, for small house,	120.78
do. Of S. Staples, for stone, &c., sold,	65.97
do. Of F.R. Gourgass, for old shed,	<u>18.50</u>
	\$ 18,655.25

And credit themselves with am't paid as per account annexed,	<u>\$ 18,534.20</u>
Balance on hand,	\$ 121.05
There is due from J.S. Keyes, for building sold,	<u>164.40</u>
Amounting to	\$ 285.45

The payments made are as follows, viz:--

To J.S. Keyes, for land	\$ 1,200.00
E. Fuller and others, for do.	750.00
Messrs. Adams & Bonney, contractors	12,783.23
Messrs. Bond & Parker, architects,	578.00
John C. Hubbard, settees and chairs for Hall and Offices,	1,005.87
Jos. L. Ross, school desks, tables, book-case, &c.	649.94
Messrs. Chilson, Richardson & Co., furnace,	365.00
W.F. Shaw, chandeliers, &c.	208.00
Messrs. Eastman & Hutchinson, stone,	245.80
S. Staples, cost of filling old cellars, auction fees, cost of procuring title to land, &c.	72.06
Alexander Stowell, clock,	50.00
H.D. Thoreau, surveying lot,	4.00
Advertising,	16.51
Sundry freight bills,	23.27
F.R. Gourgass, services, expenses, &c. as per bill,	22.12
J.R. Parks & Co., stoves, &c.,	41.35
Seth Keith, "	45.64
Eaton, Jones & Co., matting,	35.44
O. Whyte, wire cloth for cellar windows,	16.75
Thomas F. Hunt, work,	4.90
E. & W. Hall, iron work,	15.10
C.B. Davis, bocking, &c.,	7.50
F.E. Bigelow, railing to door steps, & c.	12.93
Wood & Prescott, brick and cement for drains,	43.92
Cyrus Pierce, stone and work,	72.75

E.C. Wetherbee, fence, partition in cellar, &c.,	66.63
Half cost of privy, &c.,	79.62
S. Staples for work grading yard, and sundry expenses, as per bill,	<u>117.87</u>
Total,	\$ 18,534.20
There remains to be paid, the iron fence estimated at,	625.00
and painting same, say,	20.00
Screen and division fence to privy, say,	50.00
Partition fence to front yard, "	12.00
Levelling, soil and walks, "	<u>100.00</u>
	\$ 807.00

Figure 7 Reports of Town House Building Committee April 1, 1852. Transcribed by Barbara Kurze September 6, 2012.

Reports of the Town House Building Committee

Concord March 7, 1853

The balance in the hands of the Committee, by their Report, dated April 1, 1852, was,	\$ 121.05
--	-----------

Since which they have received from J.S. Keyes for old house,	170.00
And cash borrowed of Mid. Inst. For Savings,	<u>803.00</u>
	\$ 1,094.05

And have paid Thos. F. Hunt for brick and work,	35.25
Paid Wm. Adams & Co. for iron fence &c.,	725.09
E.C. Wetherbee, stock and labor,	59.00
N. Barrett's bill, expense incurred,	1.50
S. Staples, as per ac't. on file, viz:	
C. Pierce, bill paid for stone, &c.	

35.67

J.M. Smith, bill for painting,

64.39

Thos. F. Hunt, stone & work,

73.63

F.E. Bigelow, iron work,

11.22

For work, grading, &c. and sundry small bills paid,

86.59

271.50

Cash to balance,

1.71

\$ 1,094.05

The amount borrowed by the Committee at the time of making
the previous reports, was

\$ 18,450.00

Since which they have borrowed,

803.00

\$ 19,253.00

Figure 8 Reports of the Town House Building Committee March 7, 1853. Transcribed by Barbara Kurze September 7, 2012

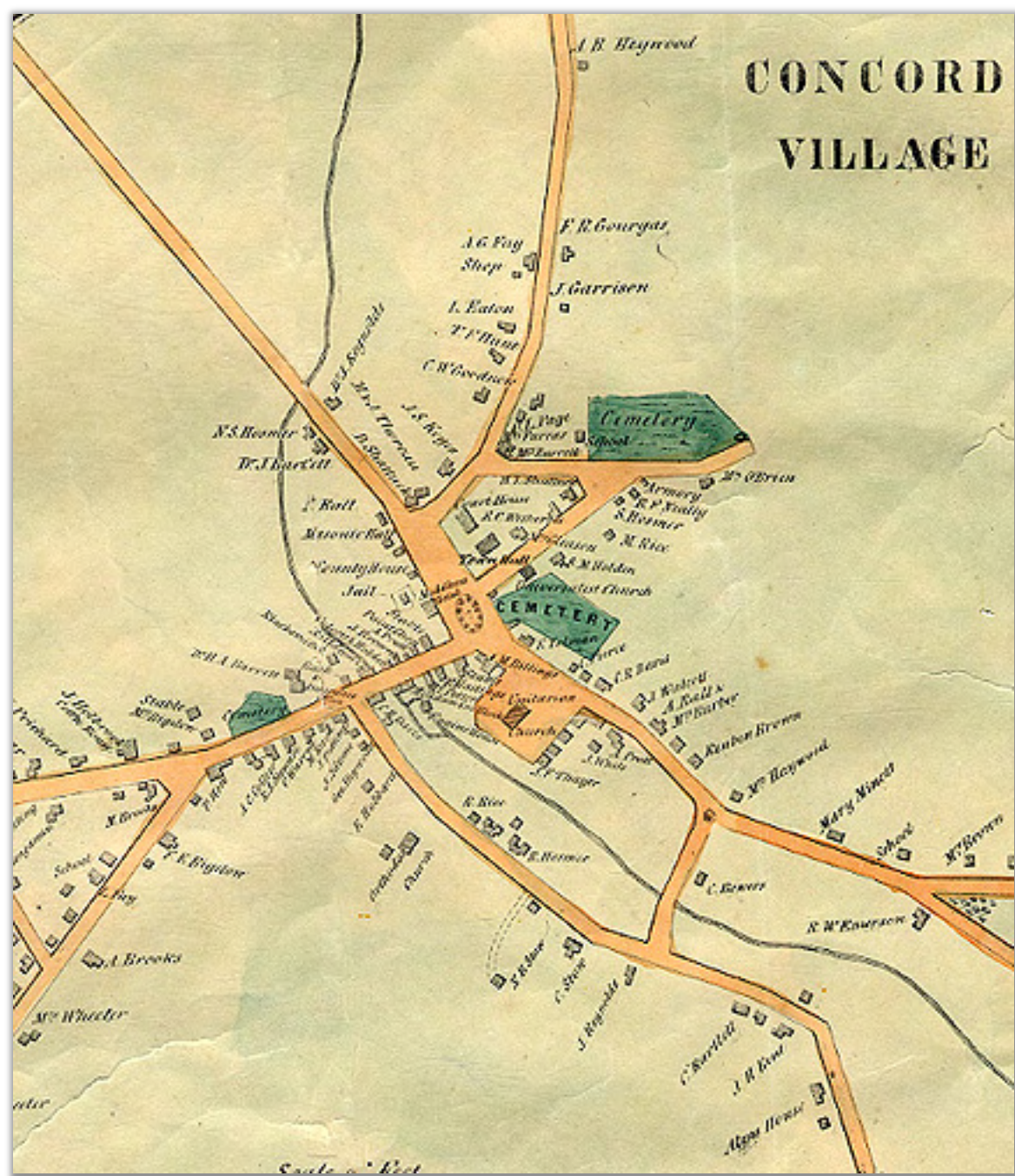


Figure 9 Walling Map, 1852 (Concord Center inset section). Courtesy of the Concord Free Public Library.



Figure 10 Walling Map, 1856 (Section). Courtesy of the Concord Free Public Library.



Figure 11 Alcott and Schoolchildren in Front of Town House, early 1860s. Courtesy of the Concord Free Public Library.

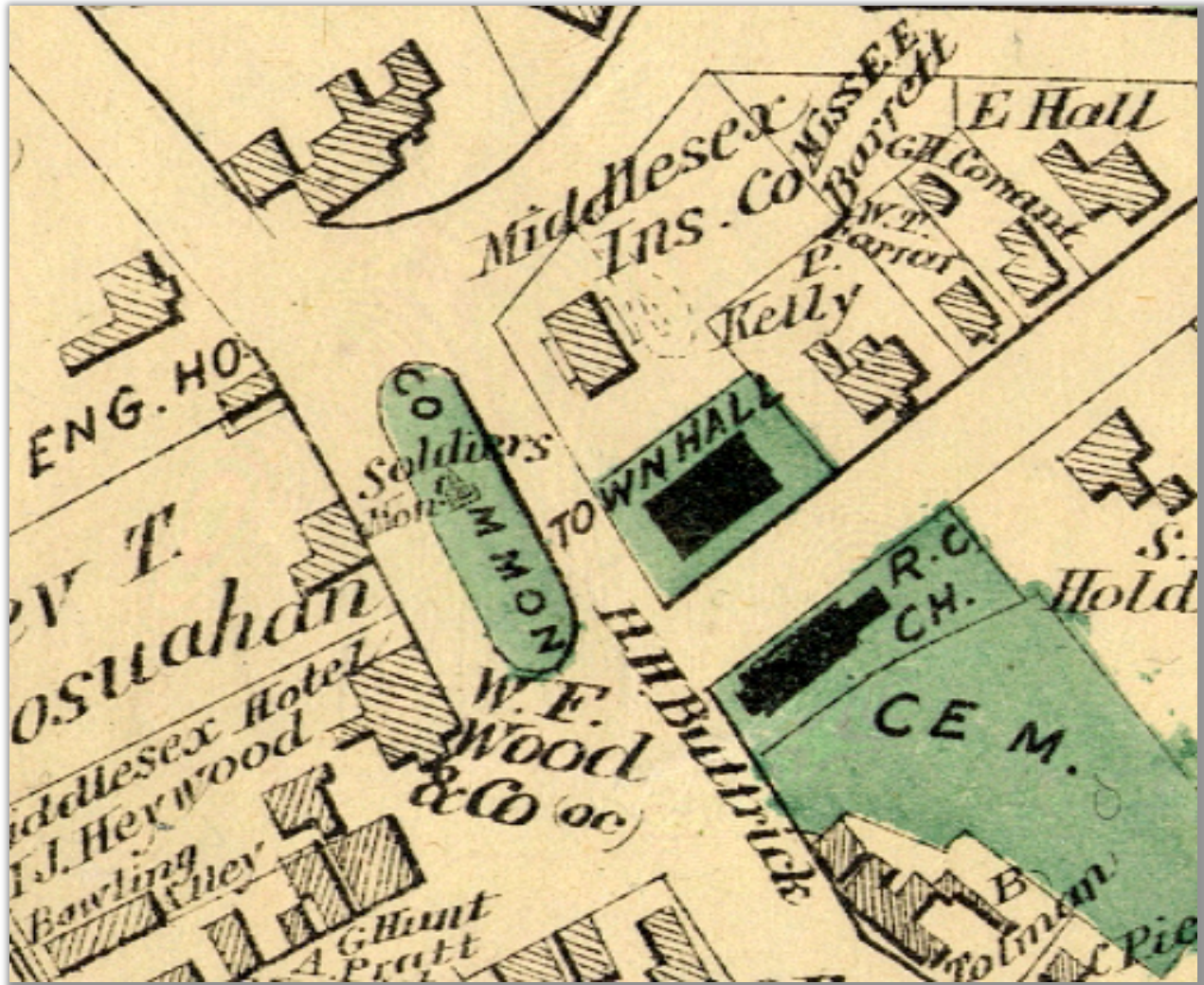


Figure 12 Beers Map, 1875 (Close-up). Courtesy of the Concord Free Public Library.



Figure 13 Card Stereograph of Town House, 1875. Courtesy of the Concord Free Public Library.



Figure 14 Munroe View of Monument Square, ca. 1885-1895. Courtesy of the Concord Free Public Library.



Figure 15 Munroe Image of Activity in Concord Center, ca. 1885-1895. Courtesy of the Concord Free Public Library.



Figure 16 Hosmer Photograph of the Town House Area, ca. 1885-1895. Courtesy of the Concord Free Public Library.

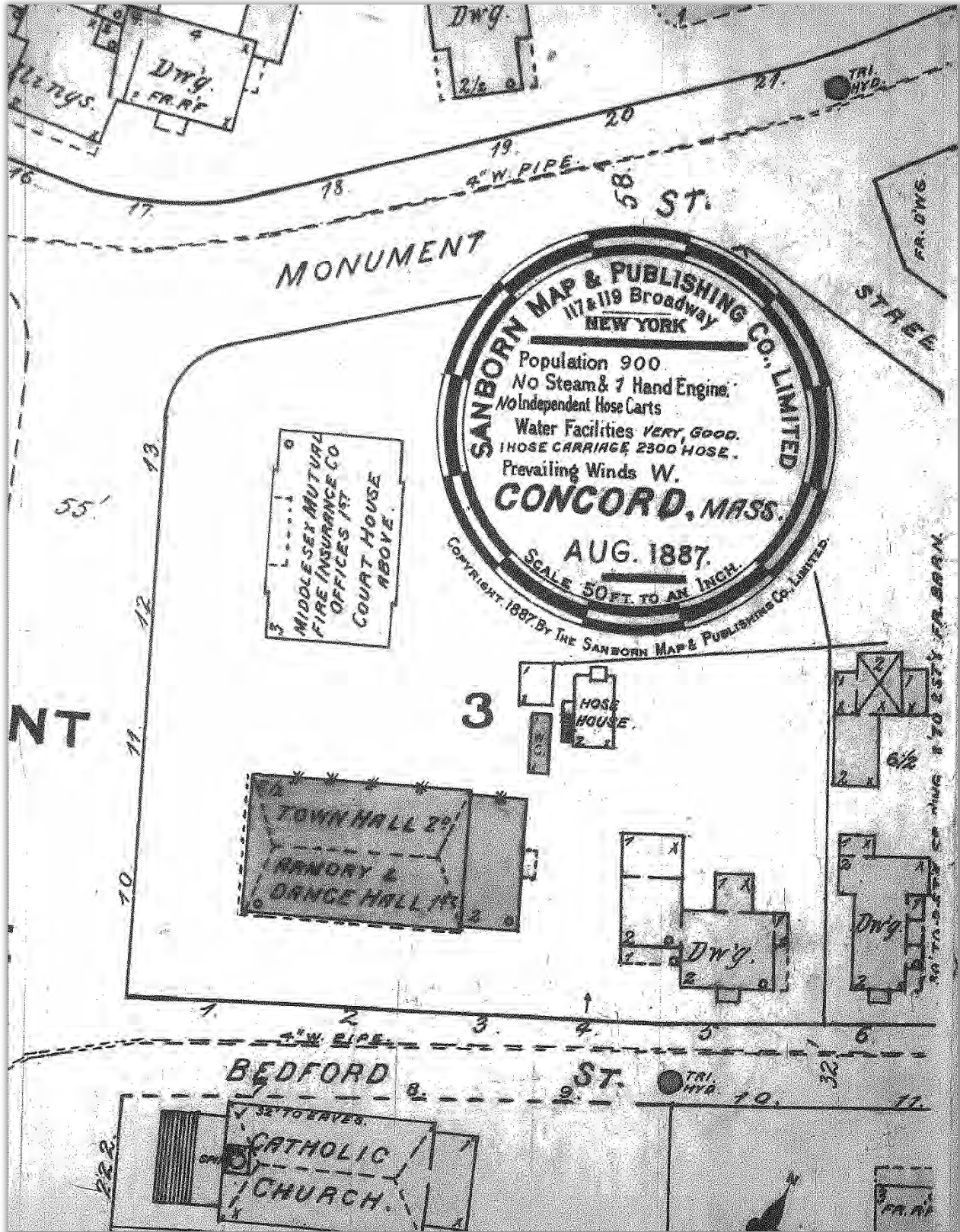


Figure 17 1887 Sanborn Fire Insurance Map

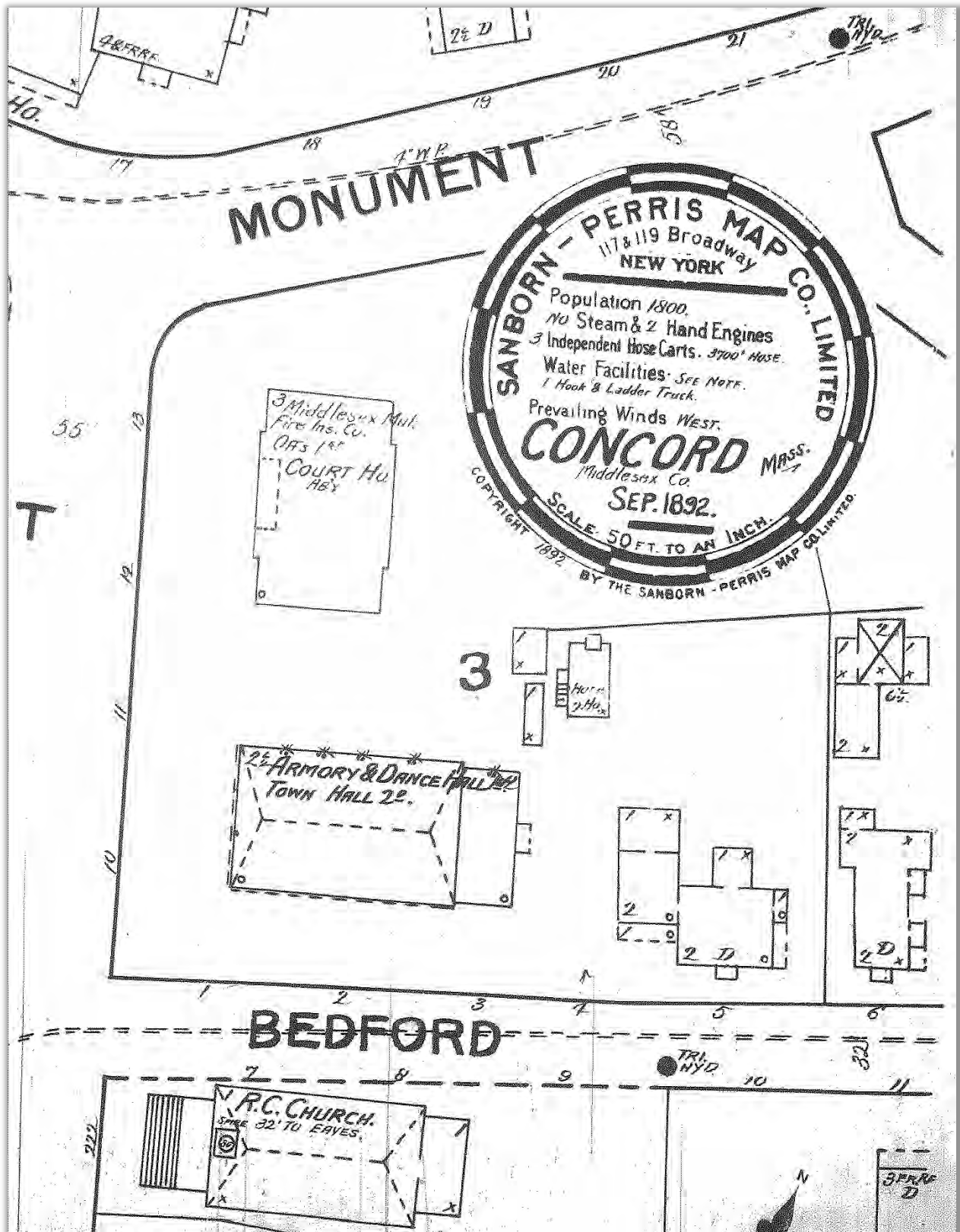
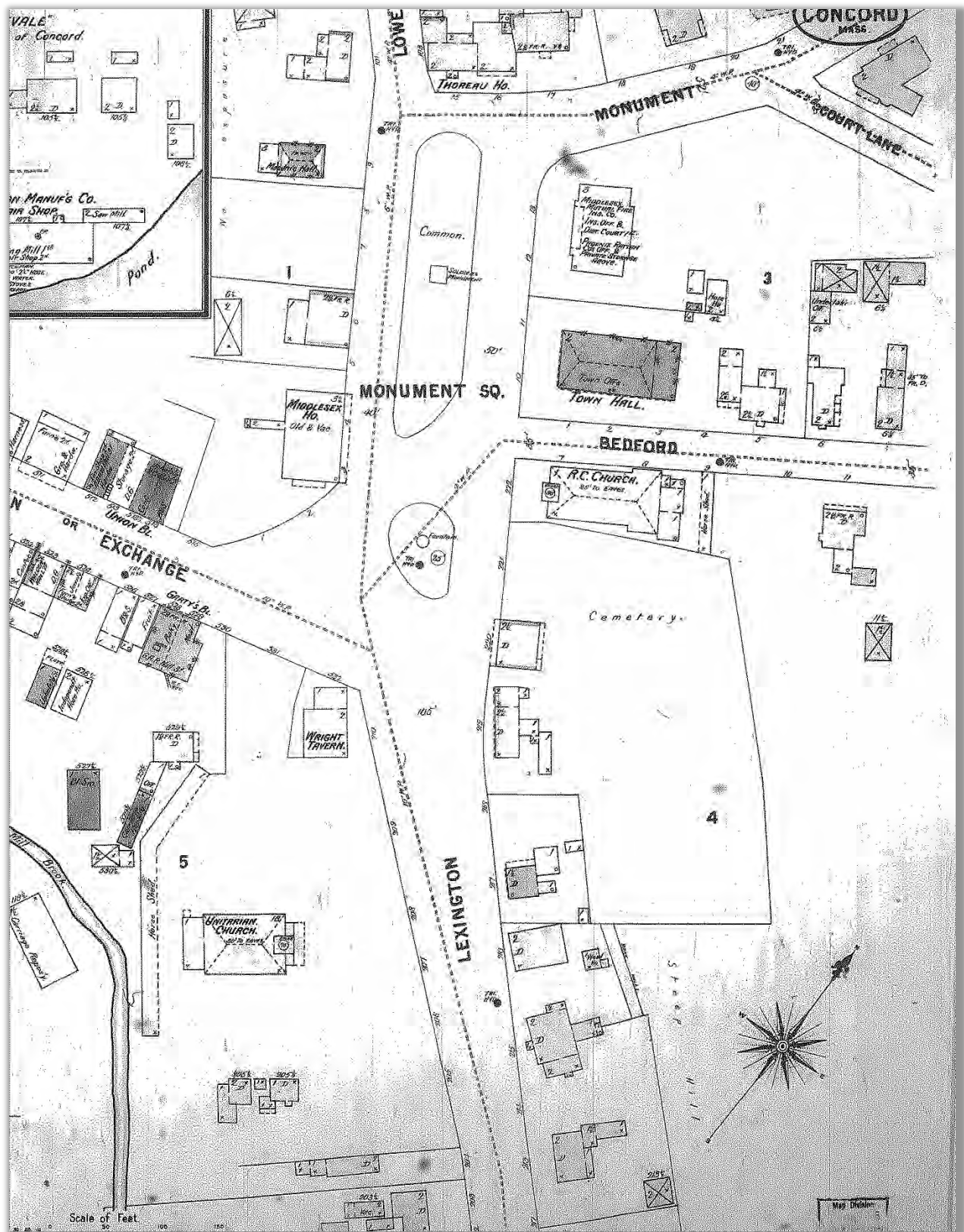


Figure 18 1892 Sanborn Fire Insurance Map



This is a detailed street map of Bedford, Massachusetts. The map shows a grid of streets with various buildings and landmarks labeled. Key features include:

- Streets:** The map shows a grid of streets. The top horizontal street is labeled "MONUMENT". The bottom horizontal street is labeled "BEDFORD". The right vertical street is labeled "COURT LA".
- Buildings and Landmarks:**
 - MIDDLESEX MUTUAL FIRE INS. CO.:** Located in the upper left, with "Ins. OFF." and "Dist. Court 1st" noted.
 - TOWN OFFS:** A large building complex in the center-left.
 - TOWN HALL:** Located below the Town Offices.
 - R. C. CHURCH:** Located in the bottom left, with "15 TO FIVES" and "HEAVY STAIRS" noted.
 - Horse Shed:** Located near the church.
 - Underaker Crk.:** A small building complex on the right side.
 - Repair Shop for Town:** A small building near the center.
- Other Features:**
 - A scale bar at the bottom left indicates distances from 0 to 10.
 - A compass rose at the bottom right indicates North (N) and South (S).
 - Various smaller buildings and structures are labeled with numbers and letters, such as "2", "3", "4", "5", "6", "7", "8", "9", "10", "11", "12", "13", "14", "15", "16", "17", "18", "19", "20", "21", "22", "23", "24", "25", "26", "27", "28", "29", "30", "31", "32", "33", "34", "35", "36", "37", "38", "39", "40", "41", "42", "43", "44", "45", "46", "47", "48", "49", "50", "51", "52", "53", "54", "55", "56", "57", "58", "59", "60", "61", "62", "63", "64", "65", "66", "67", "68", "69", "70", "71", "72", "73", "74", "75", "76", "77", "78", "79", "80", "81", "82", "83", "84", "85", "86", "87", "88", "89", "90", "91", "92", "93", "94", "95", "96", "97", "98", "99", "100".

Figure 20 1903 Sanborn Fire Insurance Map

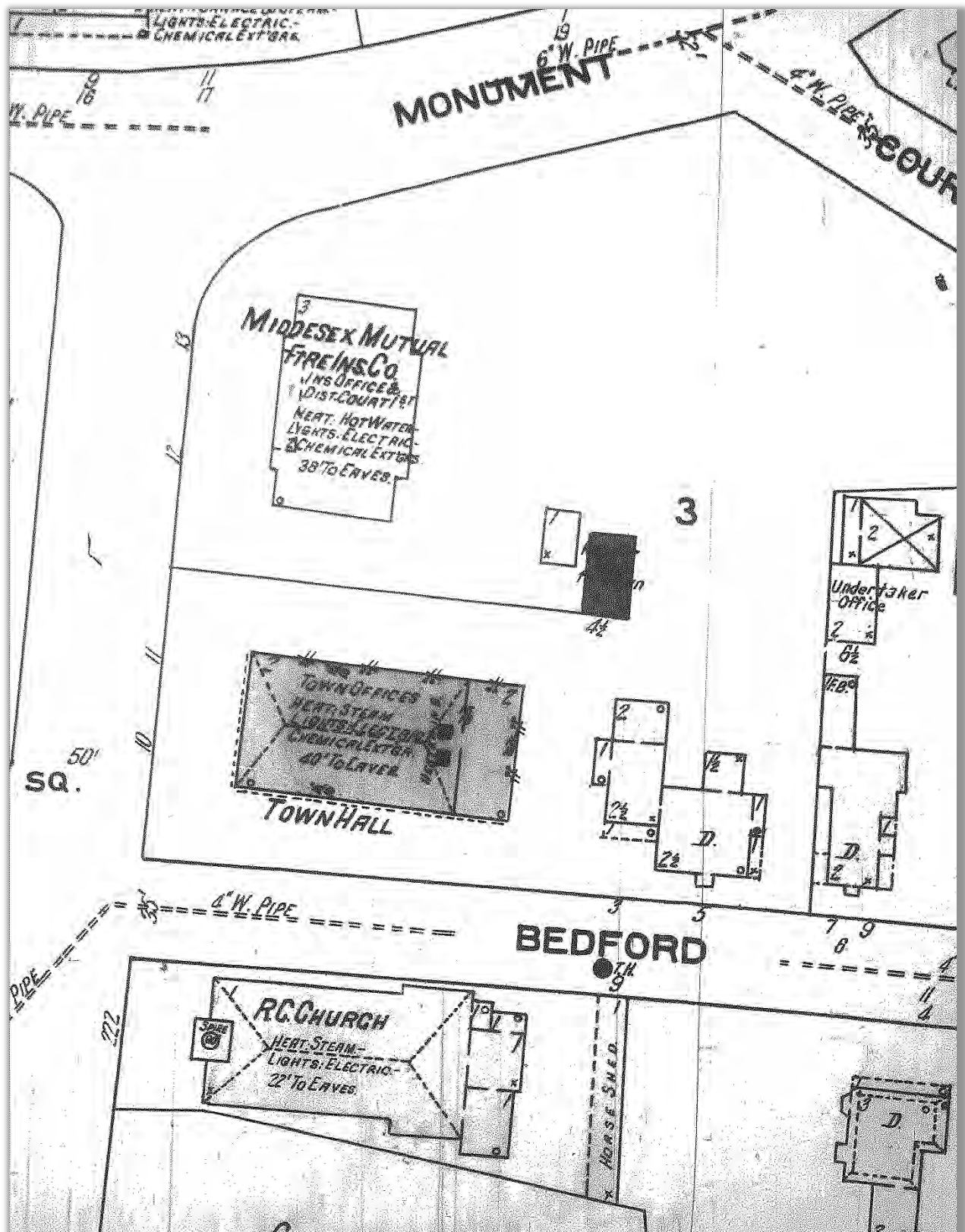


Figure 21 1909 Sanborn Fire Insurance Map



Figure 22 William H. Towler 1910 Photograph of Town House, Monument Square. Courtesy of Concord Free Public Library.

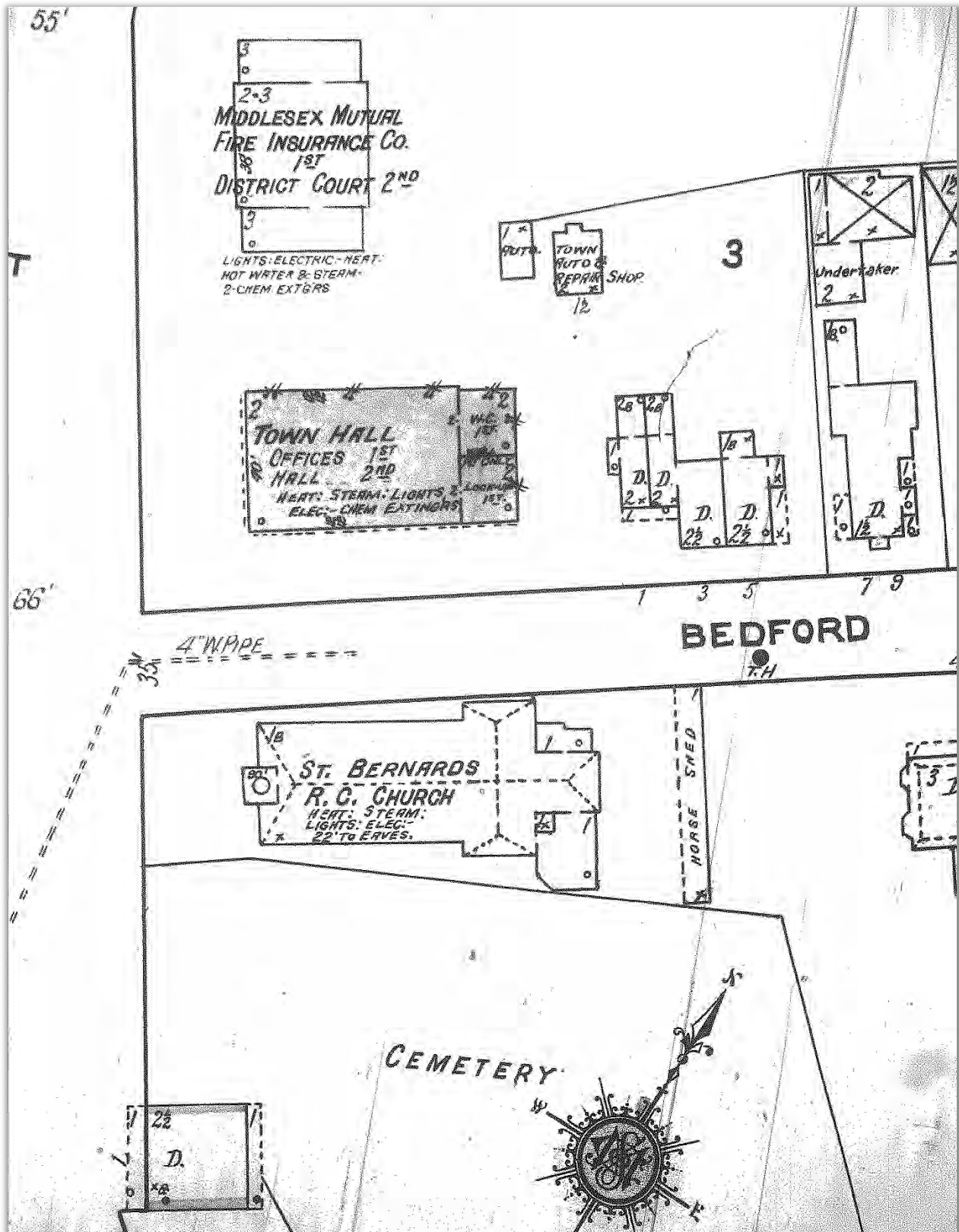


Figure 23 1918 Sanborn Fire Insurance Map

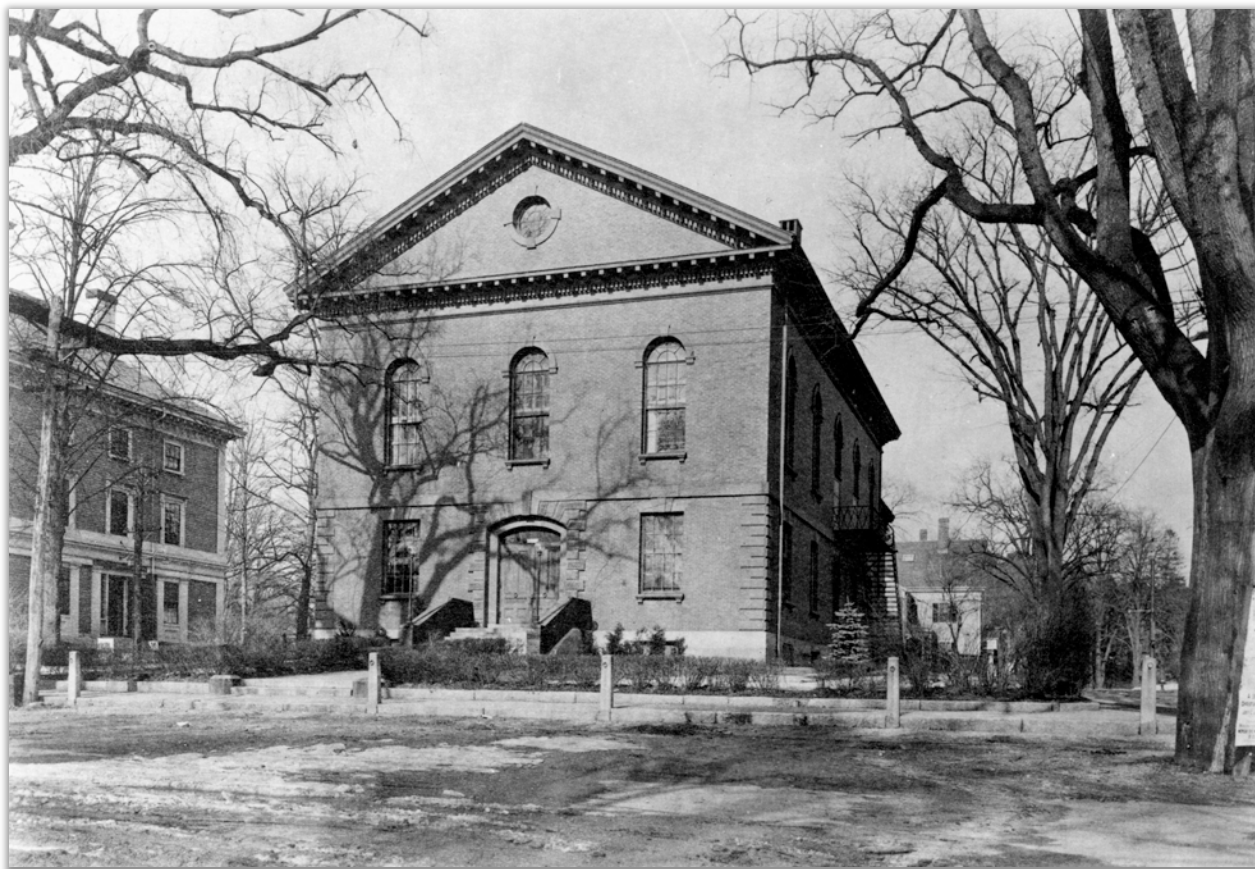


Figure 24 Gleason Photograph of the Town House, 1918. Courtesy of the Concord Free Public Library.

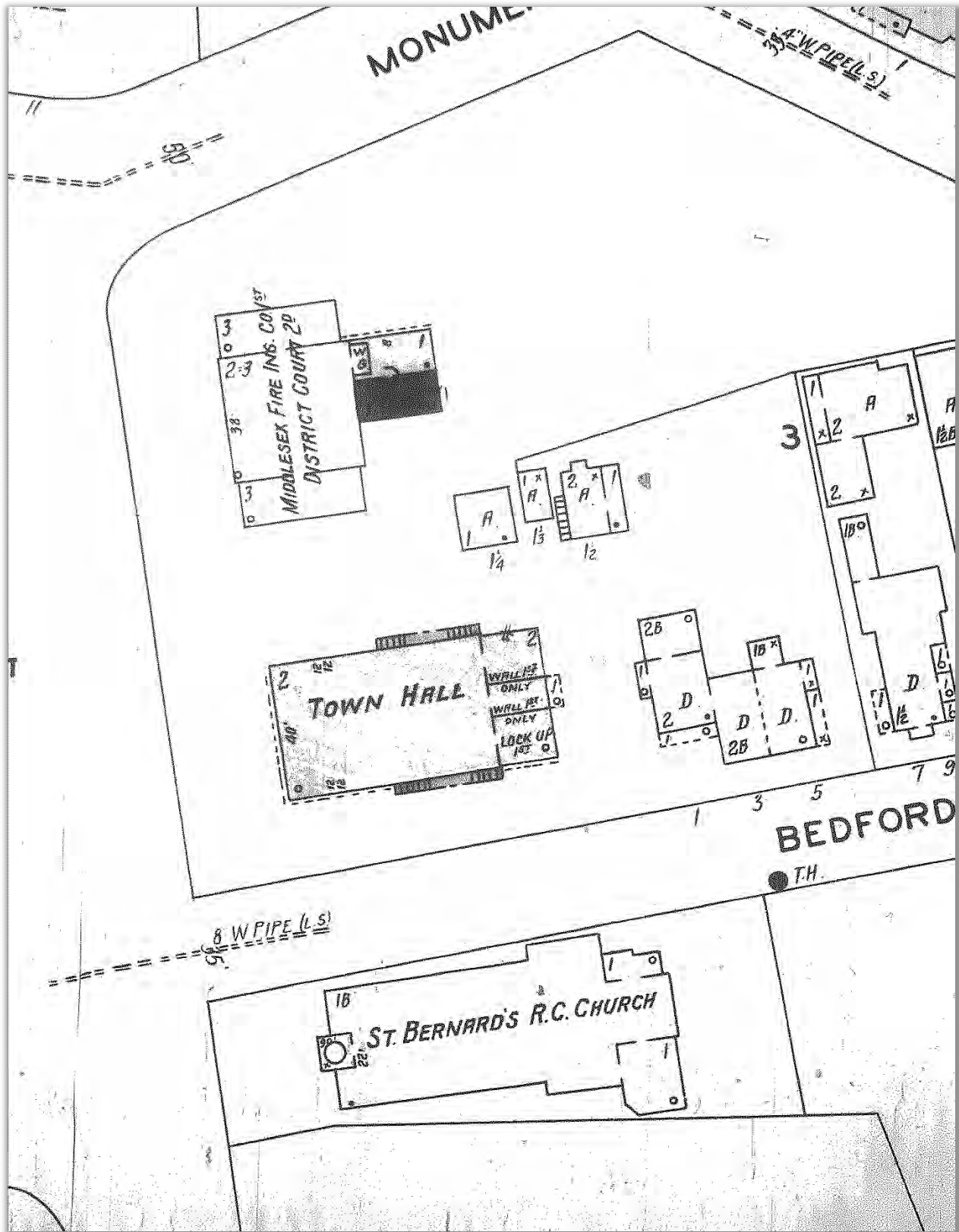


Figure 25 1927 Sanborn Fire Insurance Map

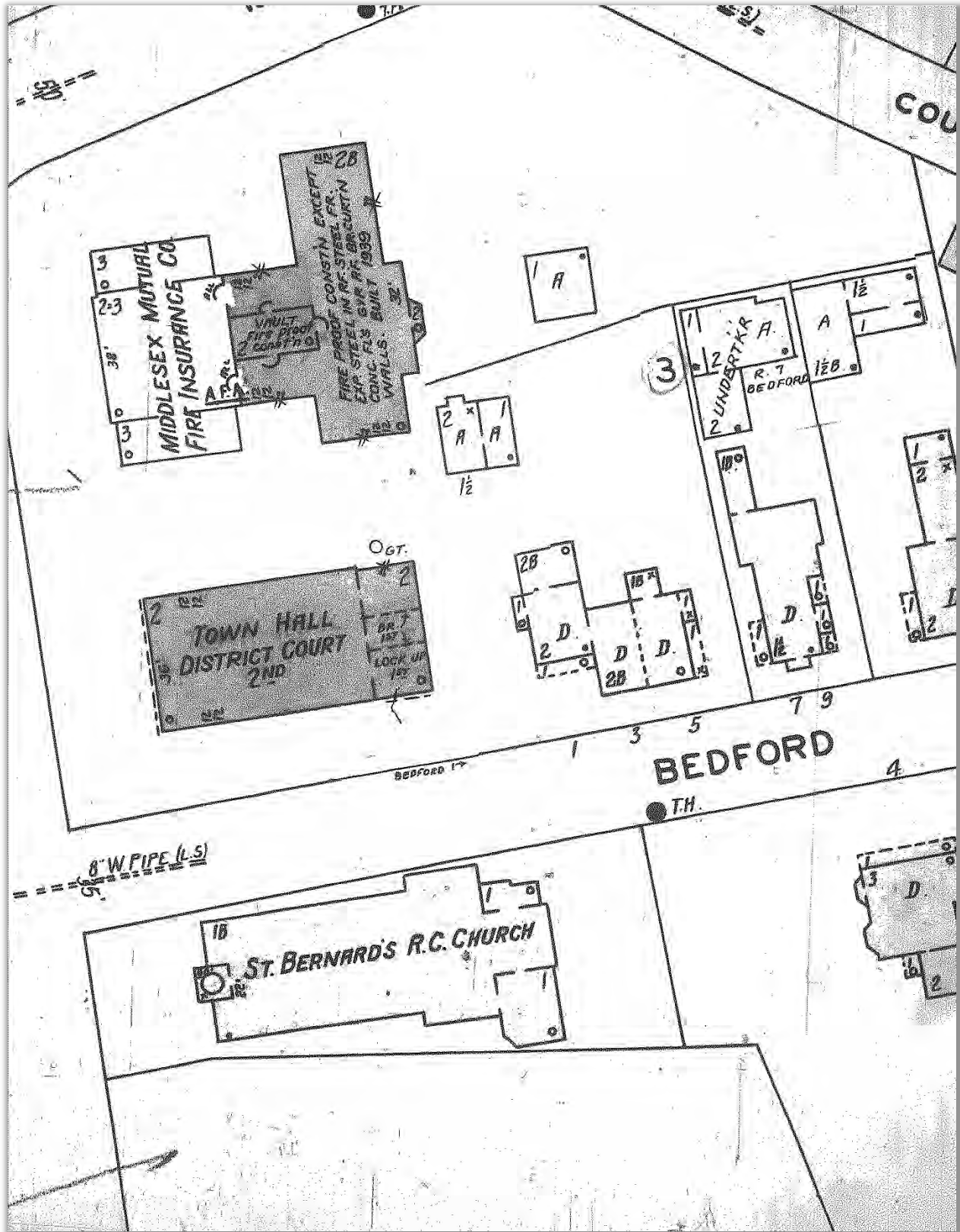


Figure 26 1948 Sanborn Fire Insurance Map



Figure 27 H. Whittemore Brown, View of Monument Square and Main Street looking north, June 1956. Courtesy of the Concord Free Public Library.



Figure 28 H. Whittemore Brown, View of Monument Square looking east from the Mill Dam, December 1956. Courtesy of the Concord Free Public Library.



Figure 29 H. Whittemore Brown, View of Monument Square looking southwest from Town Hall, November 1958. Courtesy of the Concord Free Public Library.



Figure 30 William H. Towler wide view, circa 1961. Courtesy of the Concord Free Public Library.



Figure 31 1970 Photograph. Courtesy of the Concord Free Public Library.



Figure 32 Town House, West Elevation, August 18, 2012. B. Kurze.



Figure 33 Town House, East Elevation, August 18, 2012. B. Kurze.



Figure 34 Town House, East Elevation, August 18, 2012. B. Kurze.



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